CURTIS

X-26-3

CURTIS DEVELOPMENT & MFG. CO.
3266 NORTH 33rd STREET • MILWAUKEE, WISCONSIN 53216
PHONE: 414 • 445-1817 • TWX 910-262-3125

Rec'd 7/18/67
see inside

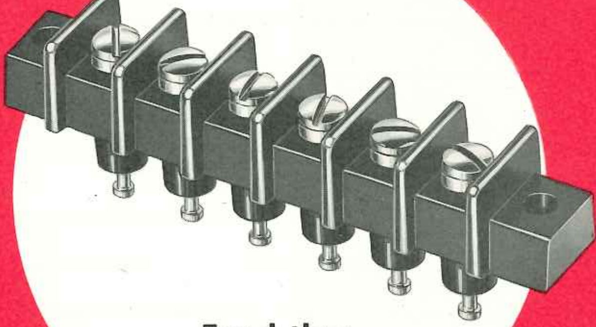
CURTIS

Catalog No. 667

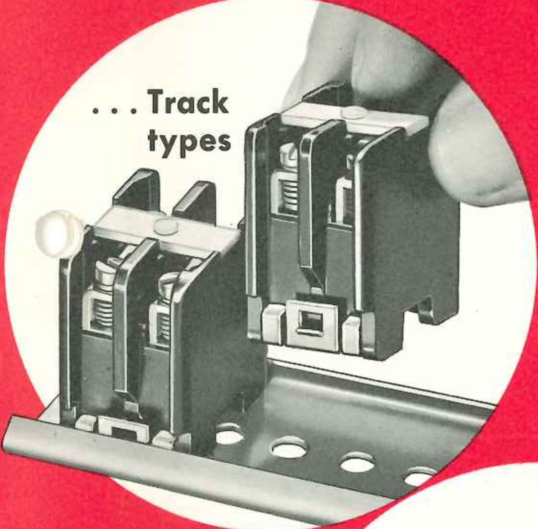
eem File System electronic engineers master. Sec. 2100

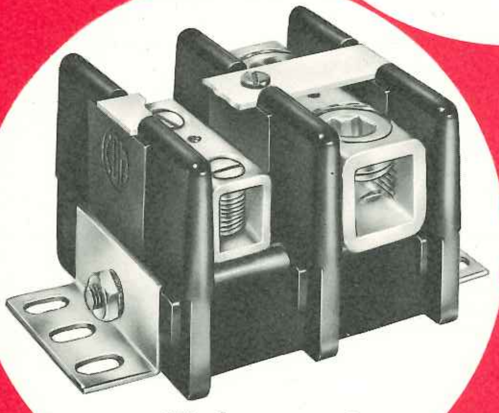
NEMA MEMBER

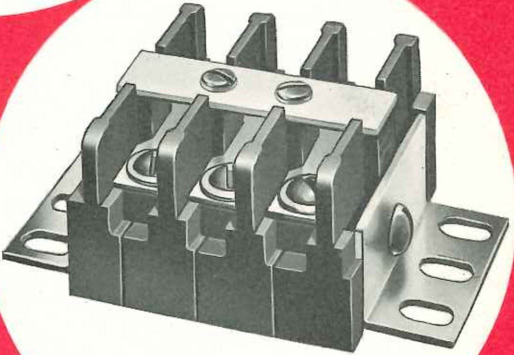
CURTIS
TERMINAL BLOCKS


. . . Feed thru

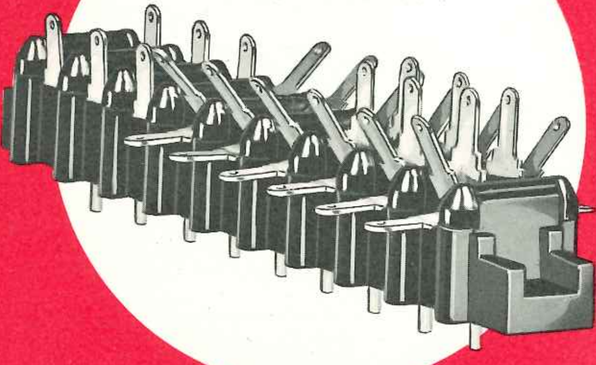
. . . Track types




. . . High current


. . . Control & Power circuit

. . . Printed circuit boards



X-26

HUNDREDS OF VARIETIES FOR THOUSANDS OF APPLICATIONS

Printed 2/66 see back page

CDM

CURTIS TERMINAL BLOCK SELECTION CHART

1. To find type, determine your voltage, current and wire size.
2. Check below for correct type and refer to page indicated.
3. After type, add dash (—) and number of terminals; i.e., 600V 75A #4 AWG, 6 Term. Type H-6.

TYPE	Number of Terminals	Electrical Rating		Wire** Size AWG	Terminal Screw Size	Marking Strip or Tag	Center to Center of Terminals, Inches	Page No.	DESCRIPTION AND SPECIAL NOTES
		Volts	Amps.						
U	1-4†	600	250	250MCM-#6	—	Yes	1 5/32	3	High pressure solderless connectors.
T	1-6†	600	125	#6 to 1/0	—	Yes	1 5/32	3	High pressure solderless connectors.
S	1-4†	600	225	To 4/0	3/8-16	Yes	2 7/16	4	Accepts wire lugs to one inch wide.
O	1-4†	600	125	To 1/0	5/16-18	Yes	1 7/8	4	Accepts wire lugs to three-quarters inch wide.
L	1-12	600	100	To #1	1/4-20	Yes	1 5/32	4	Accepts wire lugs to 27/32" wide.
*H	1-30	600	75	#4 to #12	—	Yes	.652	5	High pressure solderless connectors.
RH	1-20	600	50	#8 to #18	—	Yes	5/8	12	High pressure solderless connectors.
RT	1-20	600	35	#12 to #18	#10-32	Yes	5/8	12	Two 3-pc. wire clamping assemblies per terminal.
R	1-20	600	35	To #10	#10-32	Yes	5/8	12	Two screws per terminal or pole.
W-Series	1-164	600	To 75	To #4	#6-32	Yes	7/16 & 7/8	6	With screw terminals or solderless connectors.
*BT	1-30	600	30	To #10	#10-32	Yes	.652	5	Two screws per terminal or pole.
*CDM	1-50	600	30	To #10	#10-32	Yes	35/64	11	Convenient stacking of lugs. Very compact.
*CT	1-50	600	25	#12 to #18	#10-32	Yes	35/64	11	Two 3-pc. wire clamp assemblies per terminal.
J	1-12	300	30	To #10	#6-32	No	—	22	Up to 71 taps from one incoming lead.
MA	1-24	300	25	To #12	#8-32	No	1/2	13	Metal channel mounting.
MAT	1-24	300	25	To #12	#8-32	Yes	1/2	13	Same as "MA", but in addition has marking tags.
MAQ	1-24	300	25	To #12	4-Push on	No	1/2	13	Four 0.25" quick disconnects per pole.
MALQ	1-24	300	25	To #12	2-Push on	No	1/2	13	Two 0.25" quick disconnects and #8-32 screw per pole.
*M	1-24	300	15	To #14	#6-32	No	1/2	13	Similar to "MA" above, smaller screws.
*MT	1-24	300	15	To #14	#6-32	Yes	1/2	13	Same as "M", but in addition has marking tags.
FT	1-16	300	30	To #10	#8-32	No	5/8	14	Feed-thru terminals with 2 terminal screws.
FTS	1-16	300	30	To #10	#8-32	No	5/8	14	Feed-thru terminals with screw and solder pin.
GFT	1-18	300	20	To #12	#6-32	Yes	7/16	15	Completely insulated feed-thru for full 1/4" terminal to ground clearance.
GFTA	1-18	300	20	To #12	#8-32	Yes	7/16	15	#8 screw on surface.
GFTS	1-18	300	20	To #12	#6-32	Yes	7/16	15	Internal and external screw terminals.
GFTP	1-18	300	20	To #12	#6-32	Yes	7/16	15	Straight pin for printed circuits.
GFTC	1-18	300	20	To #12	#6-32	Yes	7/16	15	Mounted with Tinnerman Speed Nut.
GFTT	1-18	300	20	To #12	#6-32	Yes	7/16	15	Combination solder and taper pin.
EFT & EFTC	1-22	300	10	To #16	#5-40	No	3/8	16	Feed-thru terminal for interior solder connection.
EFTM	1-22	300	10	To #16	#5-40	No	3/8	16	Eliminates lugs with movable clamp-type insert.
EP & EPC	1-22	300	10	To #16	#5-40	No	3/8	17	Straight pin for printed circuits.
EPQ Series	1-22	300	To 15	To #16	—	No	3/8	17	Printed circuit and quick disconnect terminals.
E & EC	1-22	300	10	To #16	#5-40	No	3/8	16	Internal and surface-clamp terminals. Solderless connectors. No lugging or looping.
EQ Series	1-22	300	To 15	To #16	—	No	3/8	18	2, 4 or 6 quick disconnect terminals per pole.
SEI Series	1-18	300	5	To #16	#2-56	No	1/4	19	Completely insulated feed-thru.
SE Series	1-18	300	5	To #16	#2-56	No	1/4	20	Surface, feed-thru, printed circuit types.

*Available in Kit Form — See page 23 in catalog.
**When using lugs, current rating of block determines maximum wire size.
†Available but not recommended in larger sizes unless center tie down points are added.
All terminal blocks in catalog easily withstand 2500 Volt Hi-Pot Test.

Terminal blocks which have this symbol are listed by Canadian Standards Association.

CURTIS

Types "T" & "U" TERMINAL BLOCKS

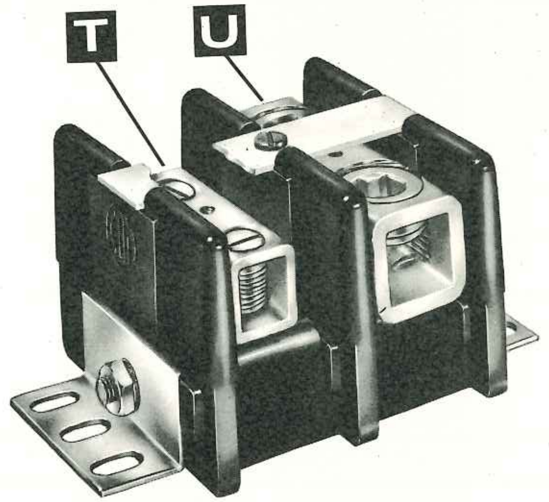
for High Current

Type "T"

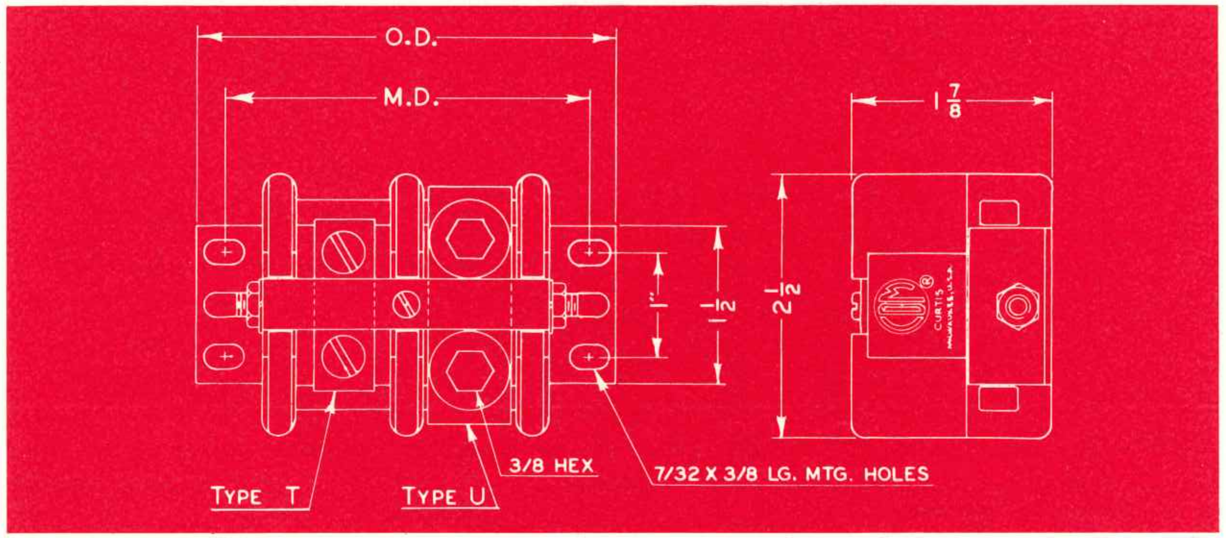
Rated—125 Amperes, 600 Volts.
Connectors—High pressure, solderless. Electrolytically pure copper, 100% conductivity. Sidewall is tapped.
Wire—Accommodates AWG No. 6 to No. 1/0 wire.
Molded Parts—Black Thermo-setting Phenolic.
Mounting Brackets— Aluminum.
Marking Strip—White fibre.
Available—1 to 6 terminals per block, factory assembled.
Longer lengths are available with tie-down points recommended. Can be combined with "L", "O" and "S" Types as illustrated on Page 4.

Type "U"

Rated—250 Amperes, 600 Volts.
Connectors—High pressure, solderless. Electrolytically pure copper, 100% conductivity. Sidewall is tapped.
Wire—Accommodates No. 6 to 250 MCM wire AWG.
Molded Parts—Black Thermo-setting Phenolic.
Mounting Brackets— Aluminum.
Marking Strip—White fibre.
Available—1 to 4 terminals per block, factory assembled.
Longer lengths are available with tie-down points recommended. Can be combined with "L", "O" and "S" Types as illustrated on Page 4.



A composite "T-U-2" Block with one of each type of terminal.



DIMENSIONS AND PRICES FOR CURTIS TYPES "T" AND "U" TERMINAL BLOCKS

*Catalog Number	Mounting Dimension Inches	Overall Dimension Inches	List Price
T-1	2 3/16	2 11/16	$ 2.28
T-2	3 11/32	3 27/32	4.12
T-3	4 1/2	5	5.96
T-4	5 21/32	6 5/32	7.80
T-5	6 13/16	7 5/16	9.64
T-6	7 31/32	8 15/32	11.48
U-1	2 3/16	2 11/16	3.12
U-2	3 11/32	3 27/32	6.14
U-3	4 1/2	5	9.16
U-4	5 21/32	6 5/32	12.18

*Letters indicate type and numbers indicate number of terminals or poles.

TYPE T & U PRESSURE WIRE CONNECTORS ARE "UNDERWRITERS' LABORATORIES, INC. LISTED"

CURTIS
Types "L"—"O" & "S" TERMINAL BLOCKS
for High Current

Types "L", "O" and "S" Terminal Blocks are designed for machine and switchboard wire terminations where heavy currents are to be handled. Ratings are determined by the values normally assigned to the maximum wire size shown and are conservative.

Composite block shown here illustrates the three types and the flexibility of the basic design. "L", "O" and "S" terminals can be combined with "T" and "U" Blocks as shown on Page 3.

Lugs (not supplied) are shown in recommended overlapping position on Types "O" and "S".

Stud type of construction is amply strong for normal applications, but if excessive mechanical loads are expected, strain relief should be provided. Longer lengths than those listed below are available; however, tie-down points are recommended.

Molded Parts—Black Thermo-setting Phenolic.

Mounting Bracket— Aluminum.

Marking Strip—White fibre, furnished on all types.

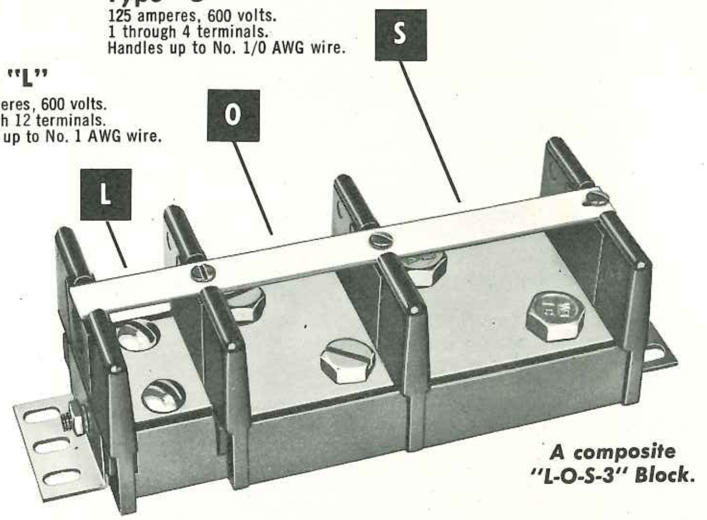
Terminal Bars—100% pure copper, nickel plated.

Screws—Steel, nickel plated.

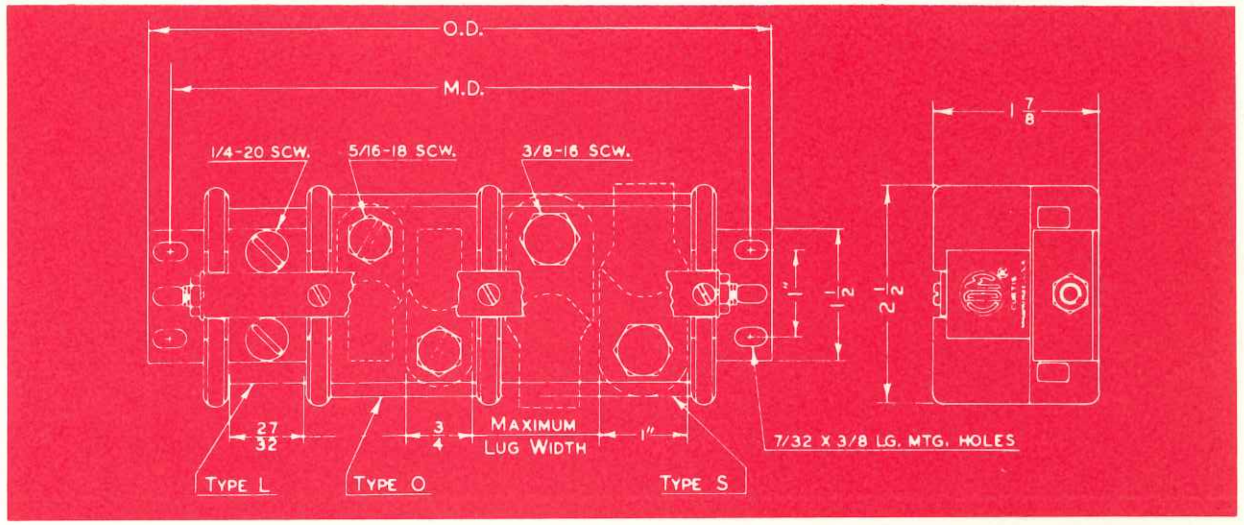
Type "S"
225 amperes, 600 volts.
1 through 4 terminals.
Handles up to No. 4/0 AWG wire.

Type "O"
125 amperes, 600 volts.
1 through 4 terminals.
Handles up to No. 1/0 AWG wire.

Type "L"
100 amperes, 600 volts.
1 through 12 terminals.
Handles up to No. 1 AWG wire.



A composite "L-O-S-3" Block.



DIMENSIONS AND PRICES FOR CURTIS TYPES "L", "O" AND "S" TERMINAL BLOCKS

*Catalog Number	Mounting Dimension Inches	Overall Dimension Inches	List Price
L-1	2 3/16	2 11/16	$1.39
L-2	3 11/32	3 27/32	2.34
L-3	4 1/2	5	3.29
L-4	5 21/32	6 5/32	4.24
L-5	6 13/16	7 5/16	5.19
L-6	7 31/32	8 15/32	6.14
L-7	9 1/8	9 5/8	7.09
L-8	10 9/32	10 25/32	8.04
L-9	11 7/16	11 15/16	8.99
L-10	12 19/32	13 3/32	9.94
L-11	13 3/4	14 1/4	10.89
L-12	14 29/32	15 13/32	11.84

*Letters indicate type and numbers indicate number of terminals or poles.

*Catalog Number	Mounting Dimension Inches	Overall Dimension Inches	List Price
O-1	2 7/8	3 3/8	$1.53
O-2	4 3/4	5 1/4	2.62
O-3	6 5/8	7 1/8	3.71
O-4	8 15/32	8 31/32	4.80
S-1	3 7/16	3 15/16	1.68
S-2	5 7/8	6 3/8	2.92
S-3	8 9/32	8 25/32	4.16
S-4	10 23/32	11 7/32	5.40

Type	Screw Size	Amps	Wire	Max. Lug Width
L	1/4"	100	#1	27/32
O	5/16"	125	1/0	3/4
S	3/8"	225	4/0	1

Note: Lugs are not furnished with blocks.

CURTIS
Type "H" TERMINAL BLOCKS
—for high current applications

Rated—75 amperes, 600 volts.

Terminals—Copper.

Connectors—High pressure solderless.

Wire—Accommodates AWG No. 12 to No. 4 wire.

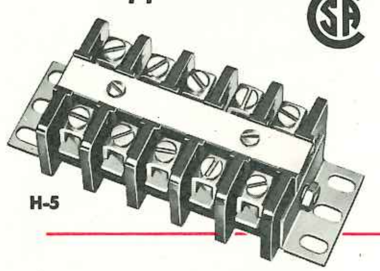
Molded Parts—Black thermosetting phenolic.

Mounting Brackets—Aluminum.

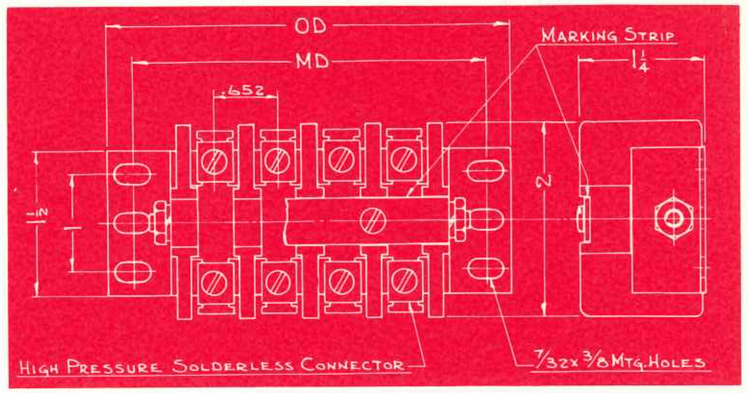
Marking Strip—White fibre.

Available—1 to 30 terminals per block, factory assembled.

TYPE H PRESSURE WIRE CONNECTORS ARE "UNDERWRITERS' LABORATORIES, INC. LISTED"



H-5



CURTIS
Type "BT" TERMINAL BLOCKS
—for control and power circuits

Rated—30 amperes, 600 volts.

Terminals—Brass bar with a No. 10-32 terminal screw in each end.

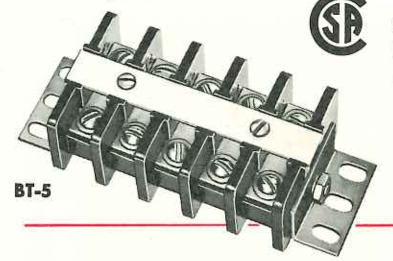
Wire—Up to No. 10 AWG.

Molded Parts—Black thermo-setting phenolic.

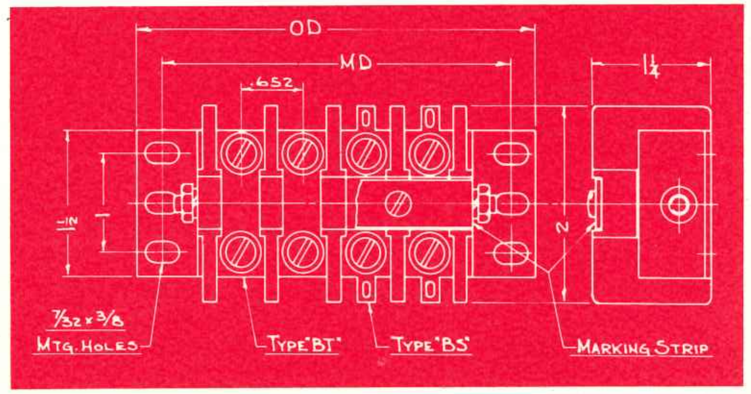
Mounting Brackets—Aluminum.

Marking Strip—White Fibre.

Available—1 to 30 terminals per block, factory assembled.



BT-5



CURTIS Type "BS" TERMINAL BLOCKS
—for control and power circuits

BS-8

Rated—30 amperes, 300 volts.

Terminals—Split-bar, solder coated brass, each terminal having both a No. 10 Terminal screw and a solder lug.

Wire—Up to No. 12 Stranded.

Molded Parts—Black thermo-setting phenolic.

Mounting Brackets—Aluminum.

Marking Strip—White fibre.

Available—Even numbers 2 to 60 terminals per block, factory assembled.

COMBINATIONS

"H," "BT" and "BS" Terminals can be combined in exactly the numbers and positions specified. Combinations of "BT" and "H" Terminals are designated Type "BTH" and combinations of "BS" and "H" Terminals to be designated Type "BSH."

To find the list price of any combination block, add together the prices of the blocks of each type having the required number of terminals.

For example to determine the price of a "BTH-6" (a "BTH" block with 6 terminals) having, let us say 3-BT Terminals and 3-H Terminals—you add the price of a 3 Terminal "BT-3" Block to the price of a 3 Terminal "H-3" Block.

When ordering either "BTH" or "BSH" Blocks, be sure to specify how many "BT's" or "BS's" and how many "H" Terminals in each block, and arrangement desired.

DIMENSIONS AND PRICES FOR CURTIS TYPES "H", "BT" AND "BS" TERMINAL BLOCKS

Type "H"		Type "BT"		Type "BS"		Dimensions same for all 3 types	
*Catalog Number	List Price	*Catalog Number	List Price	*Catalog Number	List Price	Mounting Dimension Inches	Overall Dimension Inches
H- 1	$ .71	BT- 1	$ .50	BS- 2	$ .53	1 11/16	2 3/16
H- 2	1.09	BT- 2	.74	BS- 4	.80	2 11/32	2 27/32
H- 3	1.47	BT- 3	.99	BS- 6	1.10	3	3 1/2
H- 4	1.85	BT- 4	1.24	BS- 8	1.40	3 5/8	4 1/8
H- 5	2.23	BT- 5	1.51	BS-10	1.68	4 9/32	4 25/32
H- 6	2.61	BT- 6	1.74	BS-12	1.96	4 15/16	5 7/16
H- 7	2.99	BT- 7	1.98	BS-14	2.23	5 19/32	6 3/32
H- 8	3.37	BT- 8	2.26	BS-16	2.55	6 1/4	6 3/4
H- 9	3.75	BT- 9	2.51	BS-18	2.84	6 29/32	7 13/32
H-10	4.13	BT-10	2.77	BS-20	3.14	7 9/16	8 1/16
H-11	4.51	BT-11	3.03	BS-22	3.43	8 7/32	8 23/32
H-12	4.89	BT-12	3.28	BS-24	3.72	8 27/32	9 11/32
H-13	5.27	BT-13	3.54	BS-26	4.02	9 1/2	10
H-14	5.65	BT-14	3.80	BS-28	4.31	10 5/32	10 21/32
H-15	6.03	BT-15	4.05	BS-30	4.60	10 13/16	11 5/16
H-16	6.41	BT-16	4.29	BS-32	4.87	11 15/32	11 31/32
H-17	6.79	BT-17	4.54	BS-34	5.17	12 1/8	12 5/8
H-18	7.17	BT-18	4.81	BS-36	5.47	12 25/32	13 9/32
H-19	7.55	BT-19	5.06	BS-38	5.75	13 13/32	13 29/32
H-20	7.93	BT-20	5.31	BS-40	6.08	14 1/16	14 9/16
H-21	8.31	BT-21	5.58	BS-42	6.33	14 23/32	15 7/32
H-22	8.69	BT-22	5.83	BS-44	6.63	15 3/8	15 7/8
H-23	9.07	BT-23	6.08	BS-46	6.93	16 1/32	16 17/32
H-24	9.45	BT-24	6.35	BS-48	7.23	16 11/16	17 3/16
H-25	9.83	BT-25	6.60	BS-50	7.51	17 11/32	17 27/32
H-26	10.21	BT-26	6.84	BS-52	7.79	18	18 1/2
H-27	10.59	BT-27	7.10	BS-54	8.09	18 5/8	19 1/8
H-28	10.97	BT-28	7.35	BS-56	8.38	19 5/16	19 13/16
H-29	11.35	BT-29	7.61	BS-58	8.67	19 15/16	20 7/16
H-30	11.73	BT-30	7.87	BS-60	8.97	20 19/32	21 3/32

*Letters indicate type and numbers indicate number of terminals or poles.

CURTIS W-Series
Snap-in Track-Type
TERMINAL BLOCKS

Curtis W-Series Snap-in Track-Type terminal blocks were developed to save assembly time, and provide complete flexibility as to number of poles and length. Only two items are necessary to build a terminal block . . . the terminal assembly and mounting track. No end moldings, mounting brackets or metal mounting clamps are needed. You assemble two or three poles simultaneously. Just insert one edge of the molding assembly under the flange of the channel and with very little pressure, snap it into place. To remove, just insert a screwdriver in the clip-slot and twist. Assembly will "pop" free — without need to disturb adjacent assemblies or wiring.

Curtis Cat. No 667
1966 p. 6

Type "WS"

Rated — 25 amperes, 600 volts.

Terminals — Brass terminal bars and No. 6-32 terminal screws.

Wire — Accommodates AWG #10 wire and smaller. C.S.A. requires use of lugs for wires larger than No. 16 AWG.

Molded Parts — Black thermo-setting phenolic.

Mounting Track — Steel, zinc dichromate plated.

Marking Strip — White fibre.

Available — 2 and 3 pole assemblies, individually or in factory assembled lengths 2-52 poles. Longer lengths can be made up by customers using lineal length track or on special order from factory.

Type "WT"

Rated — 50 amperes, 600 volts.

Connectors — Solderless tubular connectors with No. 10-32 terminal screws in direct contact with wire.

Wire — Accommodates AWG #16 to #8 wire.

Molded Parts — Black thermo-setting phenolic.

Mounting Track — Steel, zinc dichromate plated.

Marking Strip — White fibre.

Available — 2 and 3 pole assemblies, individually or in factory assembled lengths 2-52 poles. Longer lengths can be made up by customers using lineal length track or on special order from factory.

Type "WTC"

U.S. Pat. #3,260,989

Rated — 50 amperes, 600 volts.

Connectors — Solderless tubular connectors with traveling pressure pad which captivates the terminal screw. Pressure pad is in open position, eliminating backing out screws to insert wire. (Pat. Pend.)

Wire — Accommodates AWG #16 to #8 wire.

Molded Parts — Black thermo-setting phenolic.

Mounting Track — Steel, zinc dichromate plated.

Marking Strip — White fibre.

Available — 2 and 3 pole assemblies, individually or in factory assembled lengths 2-52 poles. Longer lengths can be made up by customers using lineal length track or on special order from factory.

U.S. Pat. #3,135,572
Can. Pat. #673,285
Great Britain Pat. #1,036,324

TYPE WT & WTC PRESSURE WIRE CONNECTORS ARE "UNDERWRITERS' LABORATORIES, INC. LISTED"

Type "WH"

Rated — 75 amperes, 600 volts.

Connectors — Solderless tubular connectors, side wall tapped for $\frac{5}{16}$-24 terminal screw.

Wire — Accommodates AWG #14 to #4 wire.

Molded Parts — Black thermo-setting phenolic.

Mounting Track — Steel, zinc dichromate plated.

Marking Strip — White fibre.

Available — Single pole terminal assembly or in factory assembled lengths. Can be combined in same track with other W-Series units.

Type "WF"

Capacity — Takes any $\frac{13}{32}$ x $1\frac{1}{2}$ ferrule type cartridge fuse.

Terminals — Brass terminal bars and #8-32 washerhead terminal screws.

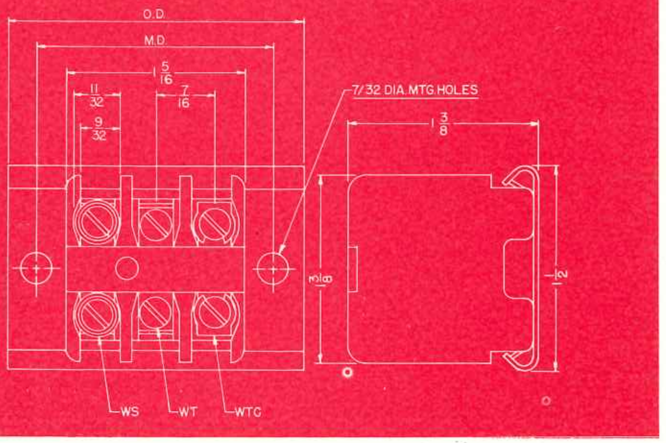
Fuse Clips — Silver plated beryllium copper.

Molded Parts — Black thermosetting phenolic — 300° F. temperature rating.

Mounting Track — Steel, zinc dichromate plated.

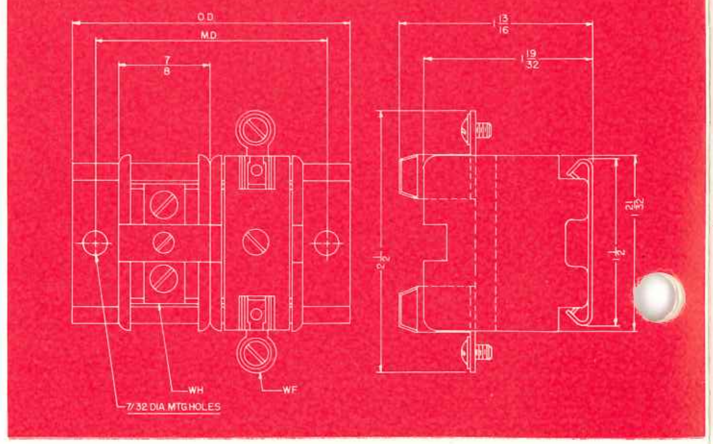
Available — As snap-in terminal assemblies or in factory assembled lengths, 1-26 poles. PWF fuse units can be combined with other types of W-Series terminal assemblies.

WS - WT - WTC MOUNTING DIMENSIONS



Note: O.D. and M.D. in table on page 9.

WH - WF MOUNTING DIMENSIONS



Note: O.D. and M.D. in table on page 8.

CURTIS W-Series
ASSEMBLIES
*Available in 8 types***

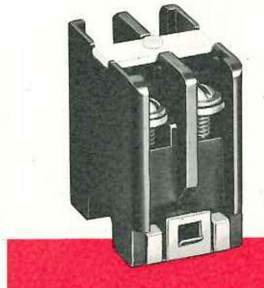
TYPE WT & WTC PRESSURE WIRE CONNECTORS ARE "UNDERWRITERS' LABORATORIES, INC. LISTED"

PARTS DISCOUNT SCHEDULE

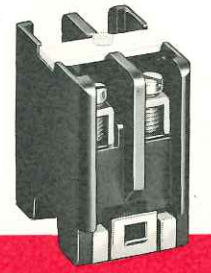
No. of Poles or Sections*	No. of 2 Pole Units	No. of 3 Pole Units	Discount	Multiplier
Up to 249	Up to 124	Up to 83	—	1.00
250-999	125-499	84-333	10%	.90
1000-2499	500-1249	334-833	25%	.75
2500-4999	1250-2499	834-1666	33%	.67
5000-9999	2500-4999	1667-3333	37%	.63
10,000-14,999	5000-7499	3334-4999	40%	.60
15,000-19,999	7500-9999	5000-6666	44%	.56
20,000 and above	AVAILABLE UPON REQUEST			

**All types of W Series assemblies can be combined for determining total poles and discount.*

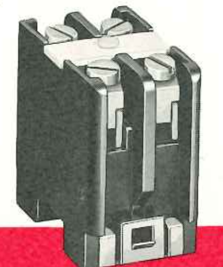
2 PWS — Complete 2 pole terminal assembly consisting of terminal bars with No. 6-32 screws, snap-in spring and white fibre marking strip. Rated 25 Amp. 600 Volts.



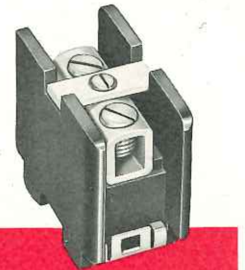
2 PWT — Complete 2 pole terminal assembly consisting of copper tubular connectors, for #16 to #8 wire, snap-in spring and white fibre marking strip. Rated 50 Amp. 600 Volts.



2 PWTC — Complete 2 pole terminal assembly with copper tubular connectors having traveling pressure pads. Includes snap-in spring and white fibre marking strip. Wire range of #16 to #8 wire. Rated 50 Amp. 600 Volts.

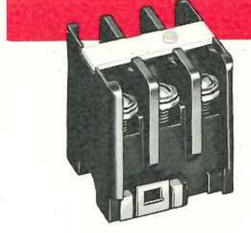


PWH — Complete single pole terminal assembly with solderless tubular connector and white fibre marking strip. Wire range of #14 to #4 wire. Rated 75 Amp. 600 Volts.

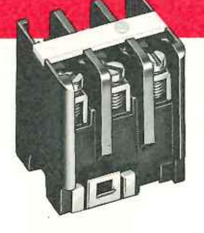


PRICE LIST

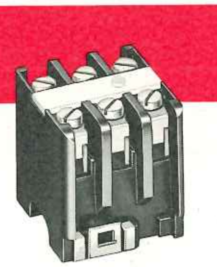
TYPE	LIST/C	TYPE	LIST/C	TYPE	LIST/C	TYPE	PRICE EACH
2 PWS	$48.50	2 PWT	$50.50	2 PWTC	$62.00	PWH	$0.30 — NET
2 PWSP	$46.50	2 PWTP	$48.50	2 PWTCP	$60.00		
3 PWS	$72.75	3 PWT	$75.75	3 PWTC	$93.00	PWF	$1.29 — LIST
3 PWSP	$69.75	3 PWTP	$72.75	3 PWTCP	$90.00	PWFP**	$1.28 — LIST



3 PWS — Complete 3 pole terminal assembly consisting of terminal bars with No. 6-32 screws, snap-in spring and white fibre marking strip. Rated 25 Amp. 600 Volts.



3 PWT — Complete 3 pole terminal assembly consisting of copper tubular connectors, for #16 to #8 wire, snap-in spring and white fibre marking strip. Rated 50 Amp. 600 Volts.



3 PWTC — Complete 3 pole terminal assembly with copper tubular connectors having traveling pressure pads. Includes snap-in spring and white fibre marking strip. Wire range of #16 to #8 wire. Rated 50 Amp. 600 Volts.

PWF — Complete snap-in, track-mounted fuse holder for use with any $\frac{13}{32}$ x $1\frac{1}{2}$ ferrule type cartridge fuse. Has brass terminal bars with #8-32 washer-head terminal screws. Also available with captivated 3-piece wire clamp assemblies. Each fuse assembly supplied with combination fuse puller and cover.

***All of the above terminal assemblies may be obtained without marking strips. Listed with suffix P in price list.*

TRACK LINEAL LENGTHS**

Track Cat. No.	Length	*List Price Per C Pieces
W-82	36″	$140.00
W-164	72″	$250.00†

***Mounting holes are $\frac{7}{32}$″ in diameter and are provided continuously on $\frac{7}{16}$″ centers.*

**Discount is that earned for terminal assemblies on the same order.*

†Six foot length cannot be shipped via parcel post.

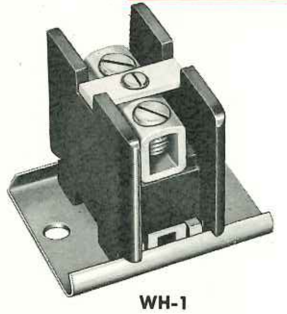
MISCELLANEOUS PARTS

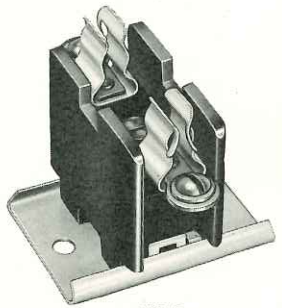
Part No.	20 W	21 W
Description	White fibre marking strip, prepunched	Nylon marking strip pin
Quantity	100 ft. Coil	—
List Price	$6.60 List/Coil	$1.36 List/C

Discount is that earned for terminal assemblies on the same order.

CURTIS W-Series

Types "WH" and "WF" Snap-in, Track-Type TERMINAL BLOCKS and TERMINAL BLOCK COVERS

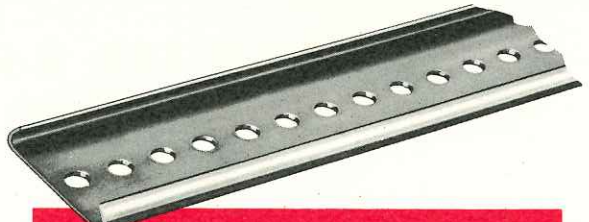

WH-1


WF-1

DIMENSIONS & PRICE LIST FOR FACTORY ASSEMBLED "WH" TERMINAL & "WF" FUSE BLOCKS

No. of Terminals	†LIST PRICES		Mounting Dimensions	Inches Overall
	WH	WF		
1	$ 1.07	$ 1.38	1 5/16	1 3/4
2	1.60	2.66	2 3/16	2 5/8
3	2.13	3.94	3 1/16	3 1/2
4	2.66	5.22	3 15/16	4 3/8
5	3.29	6.50	4 13/16	5 1/4
6	3.82	7.78	5 11/16	6 1/8
7	4.35	9.06	6 9/16	7
8	4.88	10.34	7 7/16	7 7/8
9	5.42	11.62	8 5/16	8 3/4
10	5.95	12.90	9 3/16	9 5/8
11	6.48	14.18	10 1/16	10 1/2
12	7.02	15.46	10 15/16	11 3/8
13	7.55	16.74	11 13/16	12 1/4
14	8.09	18.02	12 11/16	13 1/8
15	8.63	19.30	13 9/16	14
16	9.17	20.58	14 7/16	14 7/8
17	9.71	21.86	15 5/16	15 3/4
18	10.24	23.14	16 3/16	16 5/8
19	10.78	24.42	17 1/16	17 1/2
20	11.31	25.70	17 15/16	18 3/8
21	11.85	26.98	18 13/16	19 1/4
22	12.39	28.26	19 11/16	20 1/8
23	12.92	29.54	20 9/16	21
24	13.46	30.82	21 7/16	21 7/8
25	14.01	32.10	22 5/16	22 3/4
26	14.55	33.38	23 3/16	23 5/8

†Discount Sheets DS-139, DS-139R, 151 and 152 apply on factory assembled units.



PRE-CUT TRACK PRICE LIST

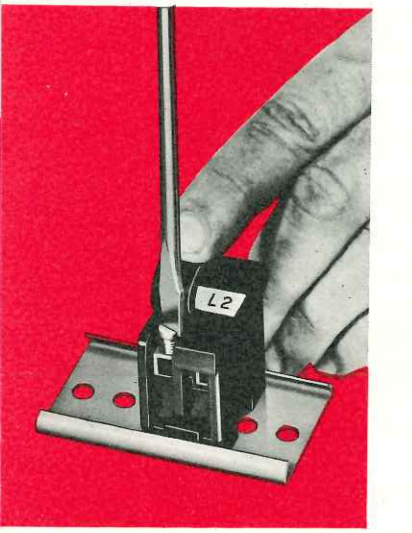
Track Catalog No.	*List Price per C Pcs.	Overall dimensions Inches	Track Catalog No.	*List Price per C Pcs.	Overall dimensions Inches
W-2	$ 12.90	1 3/4	W-28	$ 64.20	13 1/8
W-3	14.40	2 3/16	W-29	65.85	13 9/16
W-4	15.90	2 5/8	W-30	69.30	14
W-5	17.40	3 1/16	W-31	71.10	14 7/16
W-6	19.05	3 1/2	W-32	72.90	14 7/8
W-7	20.70	3 15/16	W-33	74.70	15 5/16
W-8	22.35	4 3/8	W-34	76.50	15 3/4
W-9	24.30	4 13/16	W-35	78.30	16 3/16
W-10	34.50	5 1/4	W-36	80.10	16 5/8
W-11	36.15	5 11/16	W-37	81.90	17 1/16
W-12	37.80	6 1/8	W-38	83.70	17 1/2
W-13	39.45	6 9/16	W-39	85.50	17 15/16
W-14	41.10	7	W-40	87.30	18 3/8
W-15	42.75	7 7/16	W-41	89.10	18 13/16
W-16	44.40	7 7/8	W-42	90.90	19 1/4
W-17	46.05	8 5/16	W-43	92.70	19 11/16
W-18	47.70	8 3/4	W-44	94.50	20 1/8
W-19	49.35	9 3/16	W-45	96.30	20 9/16
W-20	51.00	9 5/8	W-46	98.10	21
W-21	52.65	10 1/16	W-47	99.90	21 7/16
W-22	54.30	10 1/2	W-48	101.70	21 7/8
W-23	55.95	10 15/16	W-49	103.50	22 5/16
W-24	57.60	11 3/8	W-50	107.10	22 3/4
W-25	59.25	11 13/16	W-51	108.90	23 3/16
W-26	60.90	12 1/4	W-52	110.70	23 5/8
W-27	62.55	12 11/16			

PWH & PWF PRE-CUT TRACK PRICE LIST

Track Catalog No.	*List Price per C Pcs.	Overall Dimensions Inches	Track Catalog No.	*List Price per C Pcs.	Overall Dimensions Inches
WFH-1	$12.90	1 3/4	WFH-14	$64.20	13 1/8
WFH-2	15.90	2 5/8	WFH-15	69.30	14
WFH-3	19.05	3 1/2	WFH-16	72.90	14 7/8
WFH-4	22.35	4 3/8	WFH-17	76.50	15 3/4
WFH-5	34.50	5 1/4	WFH-18	80.10	16 5/8
WFH-6	37.80	6 1/8	WFH-19	83.70	17 1/2
WFH-7	41.10	7	WFH-20	87.30	18 3/8
WFH-8	44.40	7 7/8	WFH-21	90.90	19 1/4
WFH-9	47.70	8 3/4	WFH-22	94.50	20 1/8
WFH-10	51.00	9 5/8	WFH-23	98.10	21
WFH-11	54.30	10 1/2	WFH-24	101.70	21 7/8
WFH-12	57.60	11 3/8	WFH-25	107.10	22 3/4
WFH-13	60.90	12 1/4	WFH-26	110.70	23 5/8

When ordering pre-cut track, please specify as Track Only.

**Discount is that earned for terminal assemblies on the same order. See discount schedule page 7.*



TERMINAL BLOCK COVERS

Unique black rubber cover for use on 2-pole W-Series terminal assemblies virtually eliminates accidental shorting or shock by coming in contact with live terminals. This rubber cover with molded hinge design offers excellent insulation and provides easy access to individual W-Series terminals.

Cover is attached through the use of a thread-cutting screw. White fibre marking strip is mounted beneath head of screw. •• •••

Cover has same maximum temperature limit as terminal block molding — 300° F.

Covers are offered in bulk package (cover, marking strip and #4 self-tapping screw) for field installation, on factory assembled W-Series terminal assemblies and on factory built W-blocks.

If covers are required on factory built W-Series terminal blocks, send requirements to factory for formal quotation.

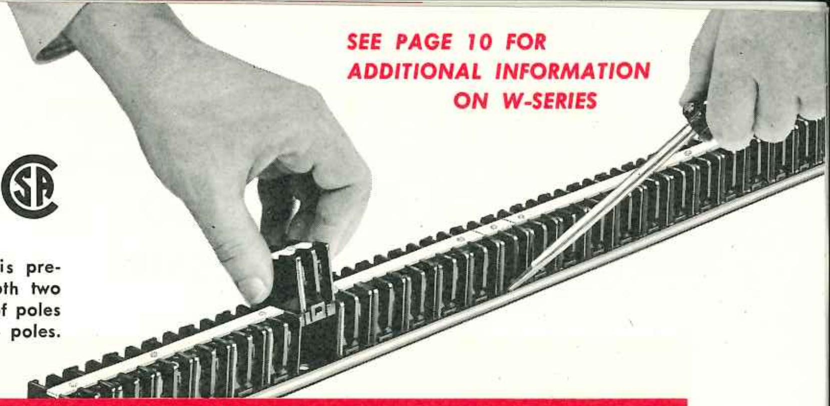
••• TERMINAL BLOCK COVER PRICE LIST

W	Cover Assembly (includes W cover, white fibre marking strip and #4 x 1/2 thread-cutting screw) ready for installation on any 2-pole W-Series terminal assembly.	$16.00 Net/C Assys.
2 PWS	Terminal Assembly with W cover, factory assembled.	$47.00 Net/C 2-pole Assys.
2 PWT	Terminal Assembly with W cover, factory assembled.	$49.00 Net/C 2-pole Assys.
2 PWTC	Terminal Assembly with W cover, factory assembled.	$56.00 Net/C 2-pole Assys.

SEE PAGE 10 FOR ADDITIONAL INFORMATION ON W-SERIES

CURTIS W-Series

Factory Assembled TERMINAL BLOCKS



For large volume work, or where identical assemblies are used, Curtis pre-assembled terminal blocks help achieve great savings in time. Since both two and three pole assemblies are available, you can order the exact number of poles you need. Pre-assembled blocks are available in any size from 2 to 164 poles.

Price List Factory Assembled Type W Terminal Blocks

TYPE WS		TYPE WT		TYPE WTC		DIMENSIONS — INCHES	
†Cat. No.	††List Price	†Cat. No.	††List Price	†Cat. No.	††List Price	Mounting	Overall
WS-2	$ 1.26	WT-2	$ 1.35	WTC-2	$ 1.40	1 5/16	1 3/4
WS-3	1.49	WT-3	1.60	WTC-3	1.70	1 3/4	2 3/16
WS-4	1.72	WT-4	1.85	WTC-4	2.00	2 3/16	2 5/8
WS-5	1.95	WT-5	2.10	WTC-5	2.30	2 5/8	3 1/16
WS-6	2.18	WT-6	2.35	WTC-6	2.60	3 1/16	3 1/2
WS-7	2.41	WT-7	2.60	WTC-7	2.90	3 1/2	3 15/16
WS-8	2.64	WT-8	2.85	WTC-8	3.20	3 15/16	4 3/8
WS-9	2.87	WT-9	3.10	WTC-9	3.50	4 3/8	4 13/16
WS-10	3.10	WT-10	3.35	WTC-10	3.80	4 13/16	5 1/4
WS-11	3.33	WT-11	3.60	WTC-11	4.10	5 1/4	5 11/16
WS-12	3.56	WT-12	3.85	WTC-12	4.40	5 11/16	6 1/8
WS-13	3.79	WT-13	4.10	WTC-13	4.70	6 1/8	6 9/16
WS-14	4.02	WT-14	4.35	WTC-14	5.00	6 9/16	7
WS-15	4.25	WT-15	4.60	WTC-15	5.30	7	7 7/16
WS-16	4.48	WT-16	4.85	WTC-16	5.60	7 7/16	7 7/8
WS-17	4.71	WT-17	5.10	WTC-17	5.90	7 7/8	8 5/16
WS-18	4.94	WT-18	5.35	WTC-18	6.20	8 5/16	8 3/4
WS-19	5.17	WT-19	5.60	WTC-19	6.50	8 3/4	9 3/16
WS-20	5.40	WT-20	5.85	WTC-20	6.80	9 3/16	9 5/8
WS-21	5.63	WT-21	6.10	WTC-21	7.10	9 5/8	10 1/16
WS-22	5.86	WT-22	6.35	WTC-22	7.40	10 1/16	10 1/2
WS-23	6.09	WT-23	6.60	WTC-23	7.70	10 1/2	10 15/16
WS-24	6.32	WT-24	6.85	WTC-24	8.00	10 15/16	11 3/8
WS-25	6.55	WT-25	7.10	WTC-25	8.30	11 3/8	11 13/16
WS-26	6.78	WT-26	7.35	WTC-26	8.60	11 13/16	12 1/4
WS-27	7.01	WT-27	7.60	WTC-27	8.90	12 1/4	12 11/16
WS-28	7.24	WT-28	7.85	WTC-28	9.20	12 11/16	13 1/8
WS-29	7.47	WT-29	8.10	WTC-29	9.50	13 1/8	13 9/16
WS-30	7.70	WT-30	8.35	WTC-30	9.80	13 9/16	14
WS-31	7.93	WT-31	8.60	WTC-31	10.10	14	14 7/16
WS-32	8.16	WT-32	8.85	WTC-32	10.40	14 7/16	14 7/8
WS-33	8.39	WT-33	9.10	WTC-33	10.70	14 7/8	15 5/16
WS-34	8.62	WT-34	9.35	WTC-34	11.00	15 5/16	15 3/4
WS-35	8.85	WT-35	9.60	WTC-35	11.30	15 3/4	16 3/16
WS-36	9.08	WT-36	9.85	WTC-36	11.60	16 3/16	16 5/8
WS-37	9.31	WT-37	10.10	WTC-37	11.90	16 5/8	17 1/16
WS-38	9.54	WT-38	10.35	WTC-38	12.20	17 1/16	17 1/2
WS-39	9.77	WT-39	10.60	WTC-39	12.50	17 1/2	17 15/16
WS-40	10.00	WT-40	10.85	WTC-40	12.80	17 15/16	18 3/8
WS-41	10.23	WT-41	11.10	WTC-41	13.10	18 3/8	18 13/16
WS-42	10.46	WT-42	11.35	WTC-42	13.40	18 13/16	19 1/4
WS-43	10.69	WT-43	11.60	WTC-43	13.70	19 1/4	19 11/16
WS-44	10.92	WT-44	11.85	WTC-44	14.00	19 11/16	20 1/8
WS-45	11.15	WT-45	12.10	WTC-45	14.30	20 1/8	20 9/16
WS-46	11.38	WT-46	12.35	WTC-46	14.60	20 9/16	21
WS-47	11.61	WT-47	12.60	WTC-47	14.90	21	21 7/16
WS-48	11.84	WT-48	12.85	WTC-48	15.20	21 7/16	21 7/8
WS-49	12.07	WT-49	13.10	WTC-49	15.50	21 7/8	22 5/16
WS-50	12.30	WT-50	13.35	WTC-50	15.80	22 5/16	22 3/4
WS-51	12.53	WT-51	13.60	WTC-51	16.10	22 3/4	23 3/16
WS-52	12.76	WT-52	13.85	WTC-52	16.40	23 3/16	23 5/8

†Letters indicate type and numbers indicate number of terminals or poles.

††Discounts per DS-139, 139R, 151 and 152 apply.

CURTIS W-Series
Six-Foot Lengths Factory Assembled TERMINAL BLOCKS

W-Series blocks can be ordered in six foot factory assembly lengths (164 poles), which can be cut to actual size required for individual application. When the six foot length is cut to make smaller lengths, no additional parts are required to finish off the block (such as end moldings or clamps). This means only one item is ordered and stocked to satisfy your needs. The mounting track is prepunched on 7/16" centers to eliminate the necessity of drilling holes for mounting.

PRICE LIST — W-Series Blocks IN 6-FOOT LENGTHS

Catalog Number	List Price*
WS-164	$39.00
WT-164	42.00
WTC-164	50.00

***Discounts per DS-139, 139R, 151 and 152 apply.**

CURTIS W-Series
TEST LEAD and JUMPER

A convenient and economical method of making test connections to a track type block. The W-Series Test Lead is designed for use with the Curtis snap-in track type W-Series terminal blocks. The phosphor bronze connector clamps over the head of the #10-32 terminal screw (WT and WTC). It is no longer necessary to use awkward alligator clips or disturb the terminal block screws for insertion and removal of test leads.

The test lead is offered with 6' of #14 AWG wire and a phosphor bronze connector which is insulated with a length of tubing.

Also available is a 6' jumper with insulated phosphor bronze connectors on both ends of the wire.

Rated — 50 amps for a short duration and 15 amps continuously.

WTC-2 Block and W Test Lead

PRICE LIST

W-Series Test Lead 6' long	W-Series Jumper 6' long
$0.75 Net/Each	$1.40 Net/Each

CURTIS CDM-Series
Type "CDMQ" Quick-Disconnect TERMINAL BLOCKS

Rated — 30 amperes, 600 volts.

Terminals — Many variations include combinations of #10-32 screws in brass terminal bars, male .250 x .032 tab terminals in a variety of configurations, and dual purpose tab terminal clamps (see drawing).

Wire — Up to #12 AWG.

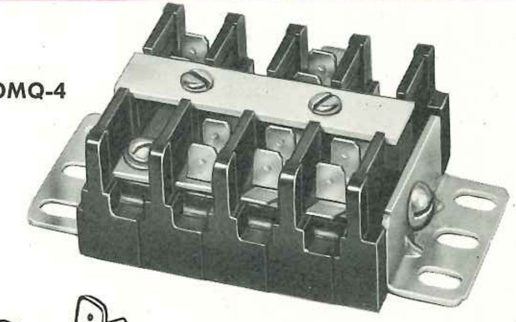
Molded Parts — Black thermo-setting phenolic.

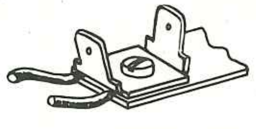
Mounting Brackets — Aluminum.

Marking Strip — White fibre.

Available — 1 to 50 terminals per block, factory assembled.

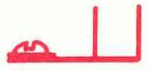
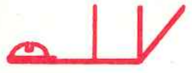
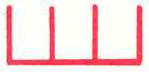
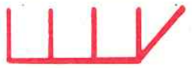
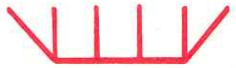
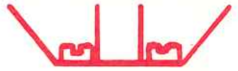
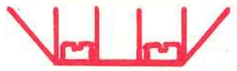
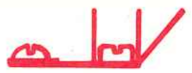
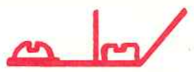
CDMQ-4



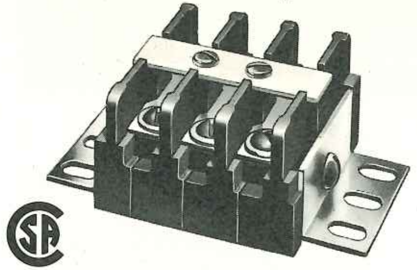


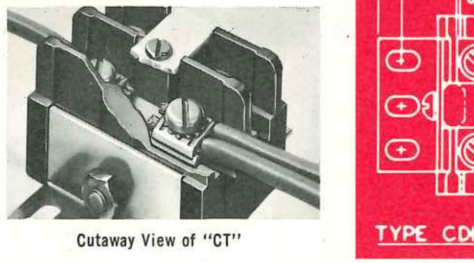
Dual purpose tab terminal provides .250 tabs and a clamp for up to two #12 AWG wires. Terminal screw is a #10 with captivated lock washer.

On all variations, the dimensions, ratings and general description are the same as the standard "CDM" terminal block on the next page. For prices on type "CDMQ" blocks, contact the factory, indicating quantity and terminal styles required.

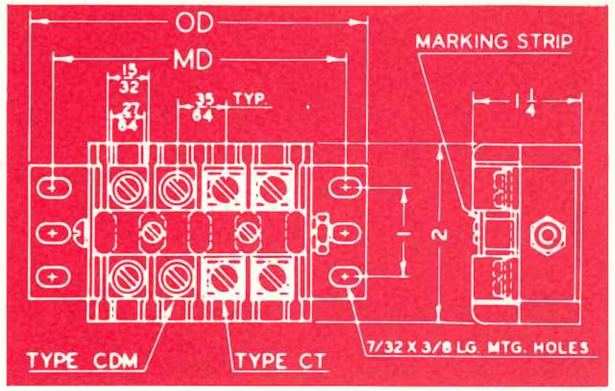
TYPE CDMQ TERMINAL STYLE VARIATIONS		
 Style 1 — #10 screw and two (2) .250 tab terminals.	 Style 2 — #10 screw and three (3) .250 tab terminals.	 Style 3 — Four (4) .250 tab terminals.
 Style 4 — Five (5) .250 tab terminals.	 Style 5 — Six (6) .250 tab terminals.	 Style 6 — Four (4) dual purpose clamp type .250 tab terminals.
 Style 7 — Six (6) dual purpose clamp type .250 tab terminals.	 Style 8 — #10 screw and three (3) dual purpose clamp type .250 tab terminals.	 Style 9 — #10 screw and two (2) dual purpose clamp type .250 tab terminals.

CURTIS CDM-Series
Types "CDM" and "CT" Terminal Blocks
for control and power circuits — very compact.





Cutaway View of "CT"



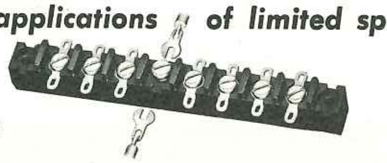
Type	Rated	Terminals	Wire	Molded Parts	Mount. Brkts.	Available
CDM	30 Amps 600 Volts	Brass term. bars with No. 10-32 washer head term. screws.	Up to #10 AWG	Black Thermo-setting Phenolic — 300° F. maximum operating temperature.	Aluminum	1-50 terminals per block factory assembled.
CT	25 Amps 600 Volts	Brass term. bars with 3-piece wire clamp assemblies.	#12 to #18 stranded, #20 solid			

DIMENSIONS AND PRICES FOR CURTIS TYPES "CDM" AND "CT" TERMINAL BLOCKS

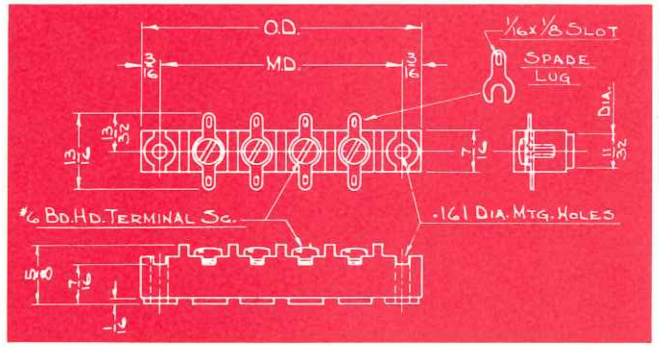
TYPE CDM		TYPE CT		DIMENSIONS INCHES		TYPE CDM		TYPE CT		DIMENSIONS INCHES	
*Catalog Number	List Price	*Catalog Number	List Price	M.D.	O.D.	*Catalog Number	List Price	*Catalog Number	List Price	M.D.	O.D.
CDM- 1	$ .48	CT- 1	$ .55	1 11/16	2 3/16	CDM-26	$ 5.94	CT-26	$ 7.80	15 11/32	15 27/32
CDM- 2	.69	CT- 2	.83	2 7/32	2 23/32	CDM-27	6.16	CT-27	8.09	15 29/32	16 13/32
CDM- 3	.90	CT- 3	1.12	2 25/32	3 9/32	CDM-28	6.37	CT-28	8.38	16 7/16	16 15/16
CDM- 4	1.12	CT- 4	1.42	3 5/16	3 13/16	CDM-29	6.59	CT-29	8.67	17	17 1/2
CDM- 5	1.36	CT- 5	1.70	3 7/8	4 3/8	CDM-30	6.83	CT-30	8.96	17 17/32	18 1/32
CDM- 6	1.54	CT- 6	2.00	4 13/32	4 29/32	CDM-31	7.04	CT-31	9.25	18 3/32	18 19/32
CDM- 7	1.75	CT- 7	2.28	4 31/32	5 15/32	CDM-32	7.27	CT-32	9.53	18 5/8	19 1/8
CDM- 8	2.00	CT- 8	2.57	5 1/2	6	CDM-33	7.47	CT-33	9.83	19 3/16	19 11/16
CDM- 9	2.21	CT- 9	2.87	6 1/16	6 9/16	CDM-34	7.71	CT-34	10.12	19 23/32	20 7/32
CDM-10	2.44	CT-10	3.15	6 19/32	7 3/32	CDM-35	7.93	CT-35	10.41	20 9/32	20 25/32
CDM-11	2.66	CT-11	3.44	7 5/32	7 21/32	CDM-36	8.12	CT-36	10.70	20 13/16	21 5/16
CDM-12	2.88	CT-12	3.74	7 11/16	8 3/16	CDM-37	8.35	CT-37	10.99	21 3/8	21 7/8
CDM-13	3.11	CT-13	4.02	8 1/4	8 3/4	CDM-38	8.58	CT-28	11.28	21 29/32	22 13/32
CDM-14	3.32	CT-14	4.32	8 25/32	9 9/32	CDM-39	8.78	CT-39	11.57	22 15/32	22 31/32
CDM-15	3.54	CT-15	4.61	9 11/32	9 27/32	CDM-40	9.01	CT-40	11.87	23	23 1/2
CDM-16	3.75	CT-16	4.89	9 7/8	10 3/8	CDM-41	9.23	CT-41	12.15	23 9/16	24 1/16
CDM-17	3.97	CT-17	5.19	10 7/16	10 15/16	CDM-42	9.44	CT-42	12.44	24 3/32	24 19/32
CDM-18	4.19	CT-18	5.48	10 31/32	11 15/32	CDM-43	9.66	CT-43	12.74	24 21/32	25 5/32
CDM-19	4.41	CT-19	5.77	11 17/32	12 1/32	CDM-44	9.90	CT-44	13.02	25 3/16	25 11/16
CDM-20	4.64	CT-20	6.06	12 1/16	12 9/16	CDM-45	10.11	CT-45	13.31	25 3/4	26 1/4
CDM-21	4.86	CT-21	6.34	12 5/8	13 1/8	CDM-46	10.30	CT-46	13.60	26 9/32	26 25/32
CDM-22	5.07	CT-22	6.64	13 5/32	13 21/32	CDM-47	10.53	CT-47	13.89	26 27/32	27 11/32
CDM-23	5.29	CT-23	6.93	13 23/32	14 7/32	CDM-48	10.75	CT-48	14.19	27 3/8	27 7/8
CDM-24	5.51	CT-24	7.21	14 1/4	14 3/4	CDM-49	10.99	CT-49	14.47	27 15/16	28 7/16
CDM-25	5.73	CT-25	7.51	14 13/16	15 5/16	CDM-50	11.18	CT-50	14.76	28 15/32	28 31/32

**Letters indicate type and numbers indicate number of terminals or poles.*

CURTIS Type "K" Lock-in TERMINAL BLOCK
— *for applications of limited space*



K-8



Rated — 15 amperes, 300 volts.

Terminals — Solder-type spade lugs furnished lock securely in place in recessed base well. Terminal screws insulated from ground.

Wire — Up to No. 16 AWG.

Molded Base — Thermo-setting phenolic.

Mounting Holes — Hole at each end integrally molded in solid base.

Available — 1 to 18 terminals per block, factory assembled.

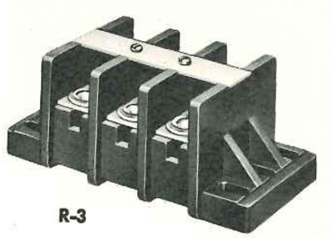
DIMENSIONS AND PRICES FOR CURTIS TYPE "K" TERMINAL BLOCKS

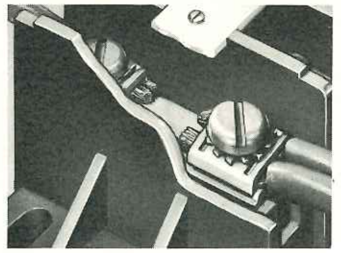
*Catalog Number	Mounting Dimension Inches	Overall Dimension Inches	List Price	*Catalog Number	Mounting Dimension Inches	Overall Dimension Inches	List Price
K-1	1	1 3/8	$ .12	K-10	5 1/2	5 7/8	$1.02
K-2	1 1/2	1 7/8	.23	K-11	6	6 3/8	1.12
K-3	2	2 3/8	.33	K-12	6 1/2	6 7/8	1.21
K-4	2 1/2	2 7/8	.44	K-13	7	7 3/8	1.31
K-5	3	3 3/8	.54	K-14	7 1/2	7 7/8	1.41
K-6	3 1/2	3 7/8	.64	K-15	8	8 3/8	1.51
K-7	4	4 3/8	.74	K-16	8 1/2	8 7/8	1.61
K-8	4 1/2	4 7/8	.84	K-17	9	9 3/8	1.69
K-9	5	5 3/8	.94	K-18	9 1/2	9 7/8	1.78

**Letters indicate type and numbers indicate number of terminals or poles.*

Types "R" and "RT" Terminal Blocks

Unique molding design provides "one-piece" appearance, built-up flexibility.


R-3


Cutaway View of RT

Rated—35 amperes, 600 volts.

Terminals—1 through 20 nickel plated copper terminal bars. "R" with No. 10-32 washer-head terminal screws, ⅜" long. "RT" with 3-piece wire clamp assemblies.

Wire—Type "R"—Up to 10 AWG.
Type "RT"—From No. 12 to 18 AWG.

Molded Parts—Black thermosetting phenolic.

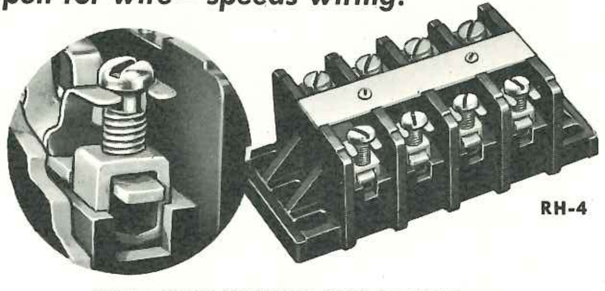
Mounting Holes—3 holes, each end, integrally molded in solid base.

Marking Strip—White fibre.

Available—1 to 20 terminals per block, factory assembled.

Type "RH" TERMINAL BLOCK

Features high pressure solderless connectors. Screw retaining clip holds connector open for wire—speeds wiring.



Cutaway view of "RH" Block. Collar is held fully open by screw, so blocks arrive ready for wire insertion.

Rated—50 amperes, 600 volts.

Terminals—High conductivity, nickel plated copper bars. No looping or lugging of wires.

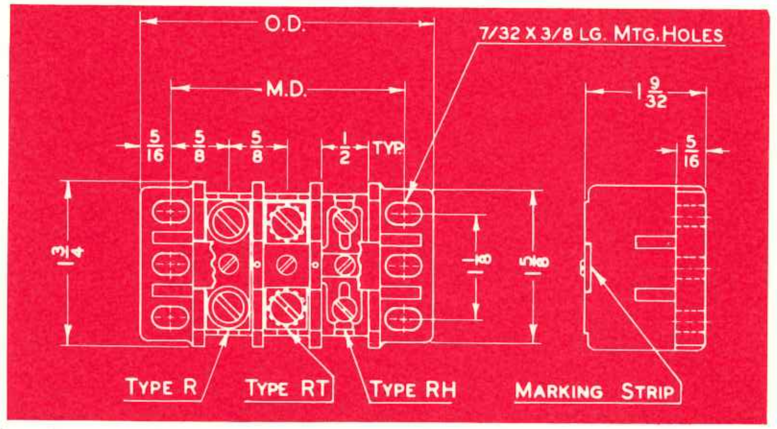
Wire—Accommodates No. 8 to No. 18 AWG wire.

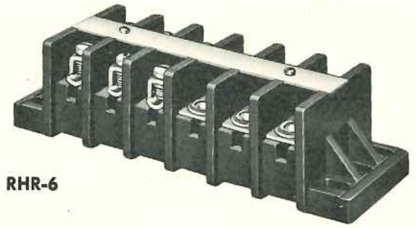
Molded Parts—Black thermosetting phenolic.

Mounting Holes—3 holes, each end, integrally molded in solid base.

Marking Strip—White fibre.

Available—1 to 20 terminals per block, factory assembled.




RHR-6

Three "RH" and three "R" terminals assembled in same block.

DIMENSIONS AND PRICES FOR CURTIS TYPES "R", "RT" AND "RH" TERMINAL BLOCKS

TYPE R		TYPES RH and RT		DIMENSIONS INCHES		TYPE
*Catalog Number	List Price	*Catalog Number	List Price	M.D.	O.D.	RHR
R-1	$ .55	RH or RT-1	$ .67	1¼	1⅞	See Below
R-2	.83	RH or RT-2	1.04	1⅞	2½	
R-3	1.11	RH or RT-3	1.41	2½	3⅛	
R-4	1.39	RH or RT-4	1.78	3⅛	3¾	
R-5	1.67	RH or RT-5	2.15	3¾	4⅜	
R-6	1.95	RH or RT-6	2.52	4⅜	5	
R-7	2.23	RH or RT-7	2.89	5	5⅝	
R-8	2.51	RH or RT-8	3.26	5⅝	6¼	
R-9	2.79	RH or RT-9	3.63	6¼	6⅞	
R-10	3.07	RH or RT-10	4.00	6⅞	7½	
R-11	$3.35	RH or RT-11	$4.37	7½	8⅛	See Below
R-12	3.63	RH or RT-12	4.74	8⅛	8¾	
R-13	3.91	RH or RT-13	5.11	8¾	9⅜	
R-14	4.19	RH or RT-14	5.48	9⅜	10	
R-15	4.47	RH or RT-15	5.85	10	10⅝	
R-16	4.75	RH or RT-16	6.22	10⅝	11¼	
R-17	5.03	RH or RT-17	6.59	11¼	11⅞	
R-18	5.31	RH or RT-18	6.96	11⅞	12½	
R-19	5.59	RH or RT-19	7.33	12½	13⅛	
R-20	5.87	RH or RT-20	7.70	13⅛	13¾	

**Letters indicate type and numbers indicate number of terminals or poles.*

To obtain list price of an RHR terminal block, take list price of RH terminals, and add to list price of R terminals.

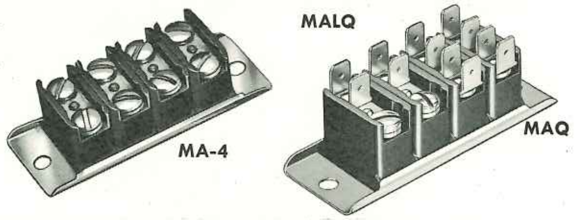
For Example: To determine list price of an RHR-6 terminal block having 3 RH and 3 R terminals—

To list price of RH-3 as given above	$1.41
Add list price of R-3 as given above	1.11
RHR-6 with 3 RH and 3R terminals	$2.52

When ordering an RHR terminal block, please be sure to specify:
1. Total number of terminals; 2. Number of RH terminals; 3. Number of R terminals; 4. Any special position requirements.

Types "MA" & "MAT", "MAQ" & "MALQ" TERMINAL BLOCKS

—for control and low power circuits



Rated—(All versions) 25 amperes, 300 volts.
Types MAQ and MALQ are not C.S.A. approved.

Terminals:
- MA and MAT—16 gauge (.051) brass terminal bars with #8-32 terminal screws.
- MAQ—Four 0.25" quick disconnect tab terminals per pole.
- MALQ—Two 0.25" quick disconnect tab terminals and #8-32 screw per pole.

NOTE: Other tab terminal combinations available upon request.

Wire—Up to #12 AWG. C.S.A. requires use of lugs for wires larger than #14 AWG.

Molded Parts—Black thermo-setting phenolic.

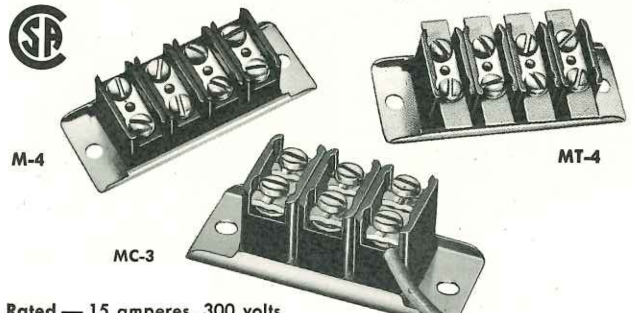
Mounting Brackets—Assembled in steel mounting channel (copper nickel plated) formed to lock individual terminals in place.

Marking Strip—(On Type "MAT" only).

Available—1 to 24 terminals per block, factory assembled.

Types "M" & "MT", "MC" & "MCT" TERMINAL BLOCKS

—for control and low power circuits



Rated—15 amperes, 300 volts.

Terminals:
- M and MT—Brass bar with #6-32 terminal screws.
- MC and MCT—Brass bar with two piece captivated clamp assembly.

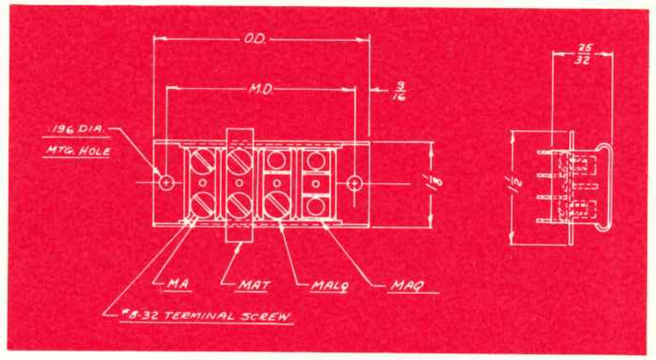
Wire:
- M and MT—Up to #14 AWG. C.S.A. requires use of lugs for wires larger than #16 AWG.
- MC and MCT—#14 to #20 AWG.

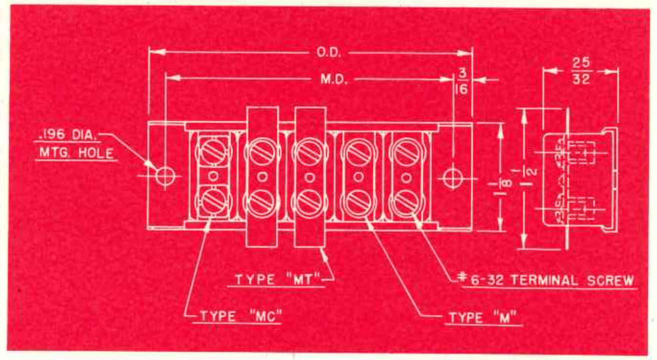
Molded Parts—Black thermo-setting phenolic.

Mounting Brackets—Assembled in steel mounting channel (copper nickel plated) formed to lock individual terminals in place.

Marking Strip—(On Type "MT" and "MCT" only).

Available—1 to 24 terminals per block, factory assembled.





DIMENSIONS AND PRICES FOR TYPES "MA", "MAT", "MAQ", "MALQ", "M", "MT", "MC" AND "MCT" TERMINAL BLOCKS

No. of Terminals	LIST PRICES								Mounting Dimensions Inches	Overall Dimensions Inches
	"MA"	"MAT"	"MAQ"	"MALQ"	"M"	"MT"	MC	MCT		
1	$ .22	$ .23	$ .31	$ .29	$ .19	$ .20	$ .25	$ .26	1	1⅜
2	.40	.42	.58	.54	.34	.36	.43	.45	1½	1⅞
3	.58	.61	.85	.79	.47	.50	.61	.64	2	2⅜
4	.76	.80	1.12	1.04	.61	.64	.79	.83	2½	2⅞
5	.94	.99	1.39	1.29	.76	.80	.99	1.04	3	3⅜
6	1.12	1.18	1.66	1.54	.90	.95	1.18	1.24	3½	3⅞
7	1.30	1.37	1.93	1.79	1.06	1.11	1.38	1.45	4	4⅜
8	1.48	1.56	2.20	2.04	1.21	1.28	1.58	1.66	4½	4⅞
9	1.66	1.75	2.47	2.29	1.35	1.42	1.76	1.85	5	5⅜
10	1.84	1.94	2.74	2.54	1.51	1.58	1.97	2.07	5½	5⅞
11	2.02	2.13	3.01	2.79	1.66	1.75	2.17	2.28	6	6⅜
12	2.20	2.32	3.28	3.04	1.82	1.90	2.37	2.49	6½	6⅞
13	2.38	2.51	3.55	3.29	1.96	2.06	2.56	2.69	7	7⅜
14	2.56	2.70	3.82	3.54	2.11	2.22	2.75	2.89	7½	7⅞
15	2.74	2.89	4.09	3.79	2.27	2.38	2.96	3.11	8	8⅜
16	2.92	3.08	4.36	4.04	2.42	2.54	3.16	3.32	8½	8⅞
17	3.10	3.27	4.63	4.29	2.56	2.70	3.34	3.51	9	9⅜
18	3.28	3.46	4.90	4.54	2.73	2.86	3.56	3.74	9½	9⅞
19	3.46	3.65	5.17	4.79	2.86	3.00	3.73	3.92	10	10⅜
20	3.64	3.84	5.44	5.04	3.01	3.17	3.93	4.13	10½	10⅞
21	3.82	4.03	5.71	5.29	3.17	3.32	4.14	4.35	11	11⅜
22	4.00	4.22	5.98	5.54	3.32	3.49	4.33	4.55	11½	11⅞
23	4.18	4.41	6.25	5.79	3.48	3.65	4.54	4.77	12	12⅜
24	4.36	4.60	6.52	6.04	3.63	3.82	4.73	4.97	12½	12⅞

CURTIS FT-Series

Type "FT" Feed-Thru TERMINAL BLOCK

— for sub-panel and chassis connections

FT-7

Rated — 30 amperes, 300 volts.

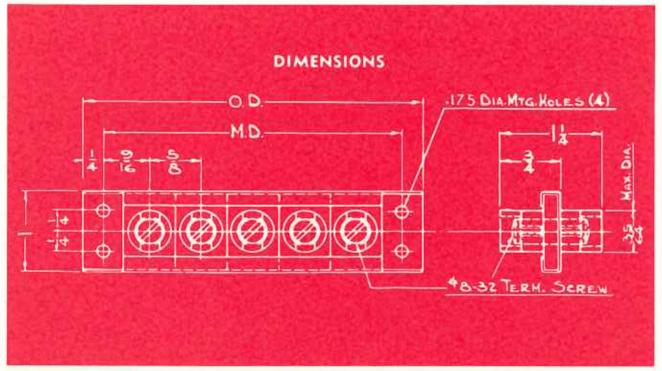
Terminals — Internal and external screw terminals with No 8-32 screws.

Wire — Up to No. 10 AWG.

Molded Parts — Individual feed-thru terminals molded of Black Thermo-setting phenolic per MIL-M-14F Type CFG and MIL-P-10420 Class 2. Colored moldings are available for circuit identification at a nominal price increase.

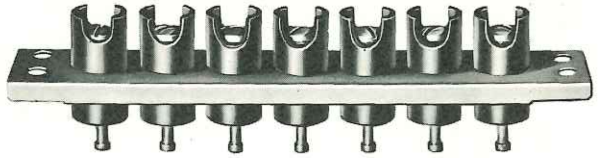
Mounting Bracket—Steel mounting channel (copper nickel plated).

Available — 1 to 16 terminals per block, factory assembled.



Type "FTS" Feed-Thru TERMINAL BLOCK

— for sub-panel and chassis connections where soldered connection is desired.



FTS-7

Rated — 30 amperes, 300 volts.

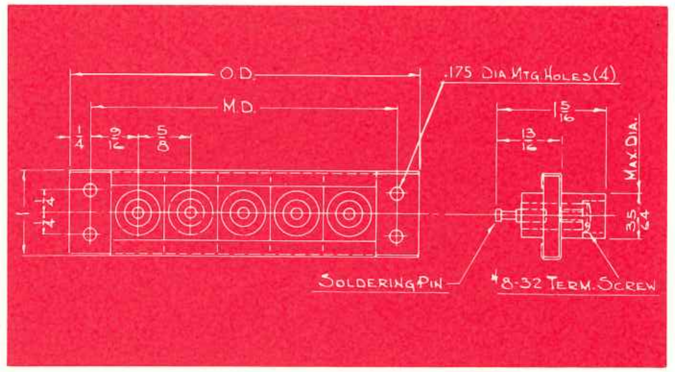
Terminals — Internal solder connections with external No. 8-32 screw connections.

Wire — Up to No. 10 AWG.

Molded Parts — Individual feed-thru terminals molded of Black Thermo-setting phenolic per MIL-M-14F Type CFG and MIL-P-10420 Class 2. Colored moldings are available for circuit identification at a nominal price increase.

Mounting Bracket—Steel mounting channel (copper nickel plated).

Available — 1 to 16 terminals per block, factory assembled.



DIMENSIONS AND PRICES FOR CURTIS TYPES "FT" AND "FTS" TERMINAL BLOCKS

Type "FT"		Type "FTS"		Dimensions same for both types	
*Catalog Number	List Price	*Catalog Number	List Price	Mounting Dimension Inches	Overall Dimension Inches
FT- 1	$ .49	FTS- 1	$ .49	1⅛	1⅝
FT- 2	.72	FTS- 2	.72	1¾	2¼
FT- 3	.95	FTS- 3	.95	2⅜	2⅞
FT- 4	1.19	FTS- 4	1.19	3	3½
FT- 5	1.44	FTS- 5	1.44	3⅝	4⅛
FT- 6	1.65	FTS- 6	1.65	4¼	4¾
FT- 7	1.88	FTS- 7	1.88	4⅞	5⅜
FT- 8	2.14	FTS- 8	2.14	5½	6
FT- 9	2.37	FTS- 9	2.37	6⅛	6⅝
FT-10	2.62	FTS-10	2.62	6¾	7¼
FT-11	2.86	FTS-11	2.86	7⅜	7⅞
FT-12	3.10	FTS-12	3.10	8	8½
FT-13	3.35	FTS-13	3.35	8⅝	9⅛
FT-14	3.58	FTS-14	3.58	9¼	9¾
FT-15	3.82	FTS-15	3.82	9⅞	10⅜
FT-16	4.05	FTS-16	4.05	10½	11

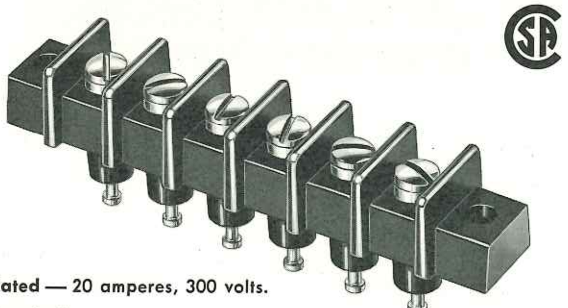
**Letters indicate type and numbers indicate number of terminals or poles.*

CURTIS GFT-Series

Fully-Insulated Feed-Thru TERMINAL BLOCKS

Available in 6 Types

Eliminates costly insulating and mounting procedures when complying with clearance requirements since insulation is an integral part of the molding.



Rated — 20 amperes, 300 volts.

Terminals:

- **GFT and GFTC** — Internal solder connections with external #6-32 screw connections. Bright tin plated for ease in soldering and excellent shelf life.
- **GFTP** — Printed circuit pin is bright tin plated for ease in soldering and excellent shelf life.
- **GFTS** — Internal and external #6-32 terminal screws.
- **GFTA** — Bright tin plated for ease in soldering and excellent shelf life. External #8-32 screw terminals.
- **GFTT** — Bright tin plated inserts which have entrance in turret for #53 taper pin. External #6-32 terminal screws. Other taper pin inserts are available upon request.

Wire — Up to one #12 AWG wire. C.S.A. requires use of lugs for wires larger than #16 AWG.

Molded Parts — Black thermo-setting phenolic.

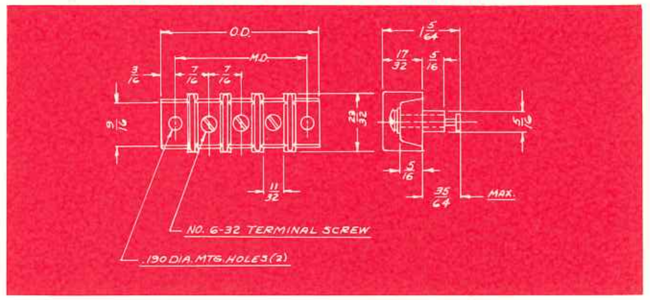
Available — 1 to 18 terminals.

Insulation — Provides full ¼" terminal to ground clearance even through 1/16" chassis.

Marking Strip — Available in white fibre for all GFT-Series blocks and mounts beneath block. Price: $.01 List/Pole.

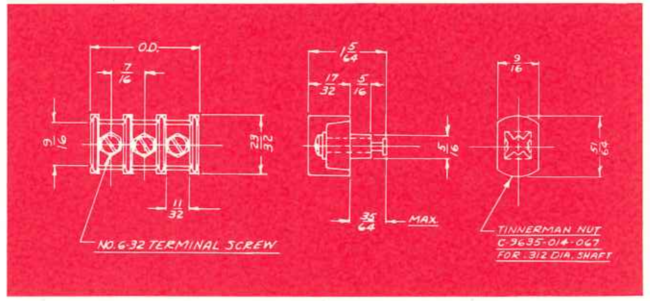
GFT and GFTA Dimensions

Identical, except GFTA has #8-32 terminal screws.

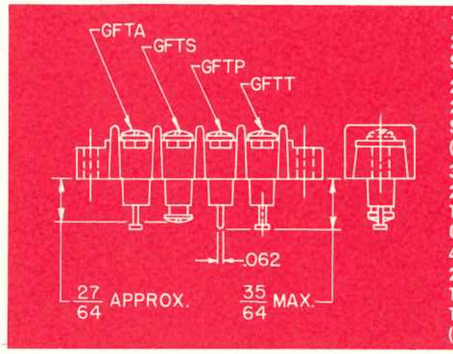


GFTC Terminal Block

All variations available, less mounting positions.



GFT Variations Available



1. Insert 267-A3 w/#8-32 Screw (Type GFTA)
2. Insert 267-A6 w/#6-32 Screw On Each End (Type GFTS)
3. Insert 267-A7 Provides Term. Pin For Printed Circuit Bd. (Type GFTP)
4. Insert 267-A24 Provides Turret With Axial #53 Taper Pin Receptacle (Type GFTT)

DIMENSIONS AND PRICES FOR CURTIS TYPES "GFT", "GFTP", "GFTS", "GFTA", "GFTC" AND "GFTT" TERMINAL BLOCKS

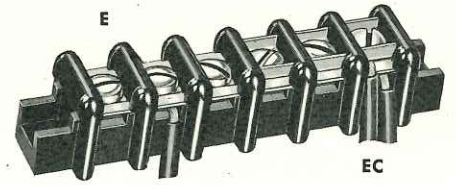
No. of Terminals	LIST PRICES				Mounting Dimensions† Inches	Overall Dimensions† Inches	GFTC	
	GFT & GFTP	GFTS	GFTA	GFTT			List Prices	Overall Dimensions† Inches
1	$ .21	$ .26	$ .24	$ .22	⅞	1¼	$ —	—
2	.39	.49	.45	.41	1 5/16	1 11/16	.39	1 1/32
3	.57	.72	.66	.60	1¾	2⅛	.57	1 15/32
4	.75	.95	.87	.79	2 3/16	2 9/16	.75	1 29/32
5	.93	1.18	1.08	.98	2⅝	3	.93	2 11/32
6	1.11	1.41	1.29	1.17	3 1/16	3 7/16	1.11	2 25/32
7	1.29	1.64	1.50	1.36	3½	3⅞	1.29	3 7/32
8	1.47	1.87	1.71	1.55	3 15/16	4 5/16	1.47	3 21/32
9	1.65	2.10	1.92	1.74	4⅜	4¾	1.65	4 3/32
10	1.83	2.33	2.13	1.93	4 13/16	5 3/16	1.83	4 17/32
11	2.01	2.56	2.34	2.12	5¼	5⅝	2.01	4 31/32
12	2.19	2.79	2.55	2.31	5 11/16	6 1/16	2.19	5 13/32
13	2.37	3.02	2.76	2.50	6⅛	6½	2.37	5 27/32
14	2.55	3.25	2.97	2.69	6 9/16	6 15/16	2.55	6 9/32
15	2.73	3.48	3.18	2.88	7	7⅜	2.73	6 23/32
16	2.91	3.71	3.39	3.07	7 7/16	7 13/16	2.91	7 5/32
17	3.09	3.94	3.60	3.26	7⅞	8¼	3.09	7 19/32
18	3.27	4.17	3.81	3.45	8 5/16	8 11/16	3.27	8 1/32

†Mounting and overall dimensions above have ± 1/32 tolerance.

CURTIS E-Series

Types "E" and "EC" TERMINAL BLOCKS

— barrier type — for use with small wires
— surface connections



Rated — 10 amperes, 300 volts.

Terminals — E has simple, efficient clamp-type terminals, eliminating need for lugs, looping or hooking of wire. EC has both internal and surface type clamps for greater wire capacity. Both E and EC have ⅜" center to center terminal spacing.

Wire — E — Maximum #18 stranded, #16 solid AWG.
EC — #16 AWG.

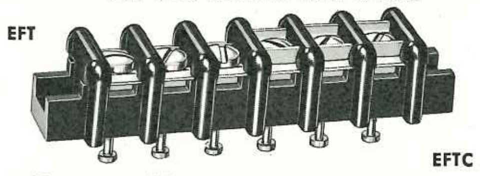
Molded Parts — Solid molded base, black thermo-setting phenolic, blind screw holes. MIL-M-14F Type CFG, MIL-P-10420 Class 2. Other materials available on request.

Mounting Holes — .160 dia. for use with #5 mounting screw.

Available — 1 to 22 terminals per block, factory assembled.

Types "EFT", "EFTC" and "EFTM" TERMINAL BLOCKS

— barrier type with panel feed-thru feature for use with small wires



Rated — 10 amperes, 300 volts.

Terminals (Bright tin plated):

EFT — Screw-terminals, externally; solder terminals internally.

EFTC — Solderless surface clamp and solder terminals internally.

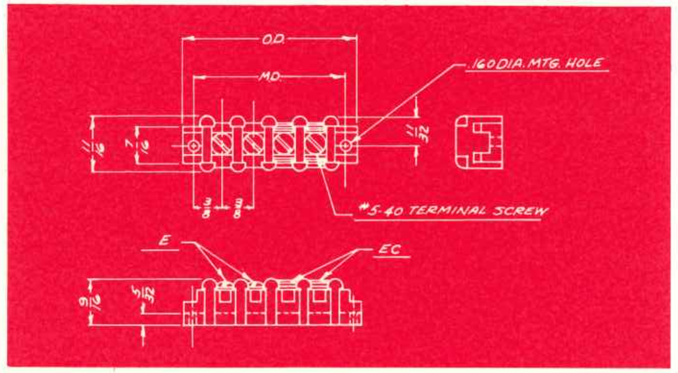
EFTM — Has movable insert to give clamp-type terminal. Eliminates lugging.

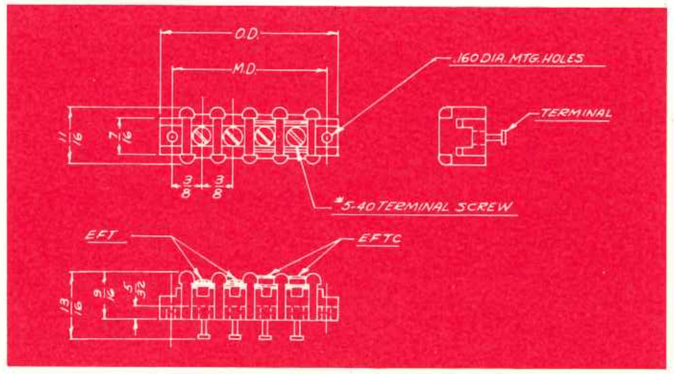
Wire — Up to #16 AWG.

Molded Parts — Molded in solid block form of black thermo-setting phenolic. MIL-M-14F Type CFG, MIL-P-10420 Class 2. Other materials available on request.

Mounting Holes — Integrally molded into solid base. .160 dia. for use with #5 mounting screw.

Available — 1 to 22 terminals per block, factory assembled.





DIMENSIONS AND PRICES FOR CURTIS TYPES "E", "EC", "EFT", "EFTC" AND "EFTM" TERMINAL BLOCKS

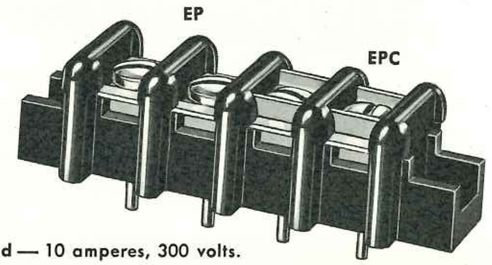
No. of Terminals	LIST PRICES					Mounting Dimensions† Inches	Overall Dimensions† Inches
	E	EC	EFT	EFTC	EFTM		
1 2 3	$ .14 .19 .25	$ .17 .25 .34	$ .17 .30 .43	$ .20 .36 .52	$ .17 .30 .43	¾ 1⅛ 1½	1 1⅜ 1¾
4 5 6	.30 .36 .41	.42 .51 .59	.57 .70 .84	.69 .85 1.02	.57 .70 .84	1⅞ 2¼ 2⅝	2⅛ 2½ 2⅞
7 8 9	.47 .52 .58	.68 .76 .85	.97 1.10 1.24	1.18 1.34 1.51	.97 1.10 1.24	3 3⅜ 3¾	3¼ 3⅝ 4
10 11 12	.63 .69 .74	.93 1.02 1.10	1.37 1.51 1.64	1.67 1.84 2.00	1.37 1.51 1.64	4⅛ 4½ 4⅞	4⅜ 4¾ 5⅛
13 14 15	.80 .85 .91	1.19 1.27 1.36	1.77 1.91 2.04	2.16 2.33 2.49	1.77 1.91 2.04	5¼ 5⅝ 6	5½ 5⅞ 6¼
16 17 18	.96 1.02 1.07	1.44 1.53 1.61	2.18 2.31 2.44	2.66 2.82 2.98	2.18 2.31 2.44	6⅜ 6¾ 7⅛	6⅝ 7 7⅜
19 20	1.13 1.18	1.70 1.78	2.58 2.71	3.15 3.31	2.58 2.71	7½ 7⅞	7¾ 8⅛
21 22	1.24 1.29	1.87 1.95	2.85 2.98	3.48 3.64	2.85 2.98	8¼ 8⅝	8½ 8⅞

†Mounting and overall dimensions above have ± 1/32 tolerance.

CURTIS EP-Series

Types "EP", "EPC", "EPQ", "EPQF" & "EPQS" TERMINAL BLOCKS FOR PRINTED CIRCUIT BOARDS

Curtis EP-Series gives you choice of 2, 4 or 6 push-on quick-disconnect tab terminals, screw terminals, or clamp-type terminals. All have .062 dia. screw machine solder pins, bright tin plated; for ease in soldering and excellent shelf life. Solder pins extend below molding . . . to solder block to printed circuit board.



Rated — 10 amperes, 300 volts.

Terminals:

EP — Each pole provided with #5-40 terminal screws.

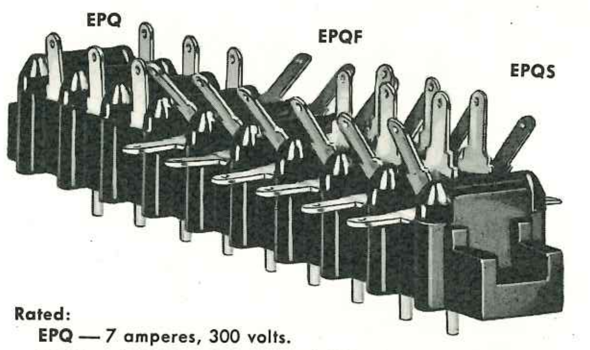
EPC — Each pole has surface clamp to eliminate lugging or looping leads.

Wire — Accommodates up to #16 AWG wire.

Molded Parts — Black thermosetting phenolic per MIL-M-14F Type CFG, MIL-P-10420 Class 2.

Mounting Holes — Integrally molded into base .160 dia. for use with #5 mounting screw.

Available — 1-22 terminals per block.



Rated:
EPQ — 7 amperes, 300 volts.
EPQF and EPQS — 15 amperes, 300 volts.

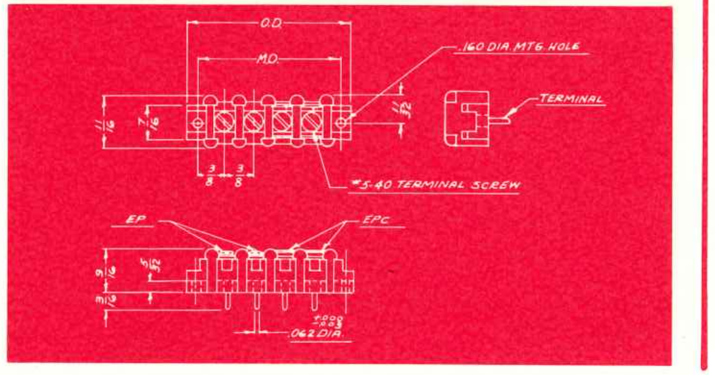
Terminals — All versions have .020 thick by .110 wide electro-tinned, quick disconnect, male tab terminals. EPQ — 2 per pole, EPQF — 4 per pole, EPQS — 6 per pole.

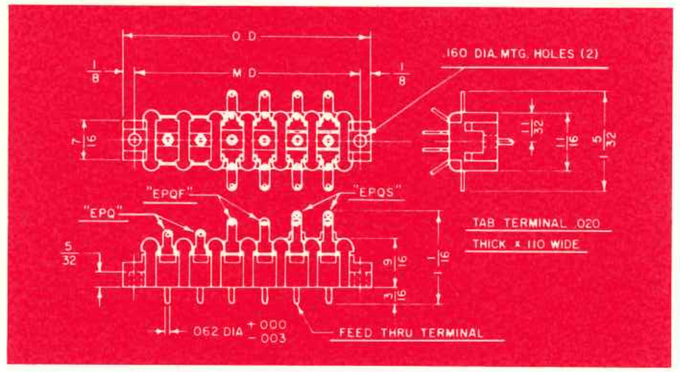
Wire — Accommodates up to #16 AWG wire.

Molded Parts — Black thermosetting phenolic per MIL-M-14F Type CFG, MIL-P-10420 Class 2.

Mounting Holes — Integrally molded into base .160 dia. for use with #5 mounting screw.

Available — 1-22 poles.





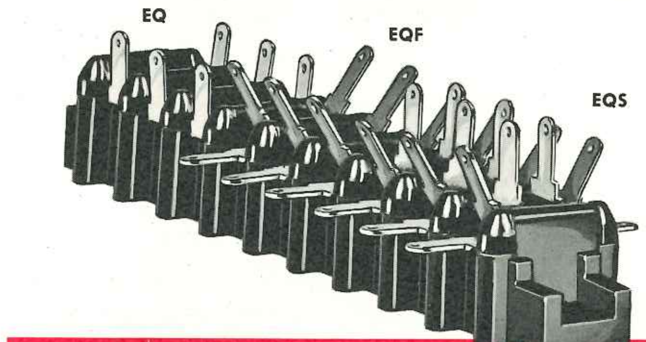
DIMENSIONS AND PRICES OF CURTIS TYPES "EP", "EPC", "EPQ", "EPQF" AND "EPQS" TERMINAL BLOCKS

Number of Terminals	LIST PRICES					Mounting Dimensions† Inches	Overall Dimensions† Inches
	EP	EPC	EPQ	EPQF	EPQS		
1 2 3	$ .17 .30 .43	$ .20 .36 .52	$ .19 .31 .44	$ .21 .34 .48	$ .23 .38 .53	¾ 1⅛ 1½	1 1⅜ 1¾
4 5 6	.57 .70 .84	.69 .85 1.02	.56 .69 .81	.62 .76 .90	.68 .83 .98	1⅞ 2¼ 2⅝	2⅛ 2½ 2⅞
7 8 9	.97 1.10 1.24	1.18 1.34 1.51	.94 1.06 1.19	1.04 1.18 1.32	1.13 1.28 1.43	3 3⅜ 3¾	3¼ 3⅝ 4
10 11 12	1.37 1.51 1.64	1.67 1.84 2.00	1.31 1.44 1.56	1.46 1.60 1.74	1.58 1.73 1.88	4⅛ 4½ 4⅞	4⅜ 4¾ 5⅛
13 14 15	1.77 1.91 2.04	2.16 2.33 2.49	1.69 1.81 1.94	1.88 2.02 2.16	2.03 2.18 2.33	5¼ 5⅝ 6	5½ 5⅞ 6¼
16 17 18	2.18 2.31 2.44	2.66 2.82 2.98	2.06 2.19 2.31	2.30 2.44 2.58	2.48 2.63 2.78	6⅜ 6¾ 7⅛	6⅝ 7 7⅜
19 20	2.58 2.71	3.15 3.31	2.44 2.56	2.72 2.86	2.93 3.08	7½ 7⅞	7¾ 8⅛
21 22	2.85 2.98	3.48 3.64	2.69 2.81	3.00 3.14	3.23 3.38	8¼ 8⅝	8½ 8⅞

†Mounting and overall dimensions above have ± 1/32 tolerance.

CURTIS EQ-Series

Types "EQ", "EQF" & "EQS" TERMINAL BLOCKS FOR SURFACE CONNECTIONS

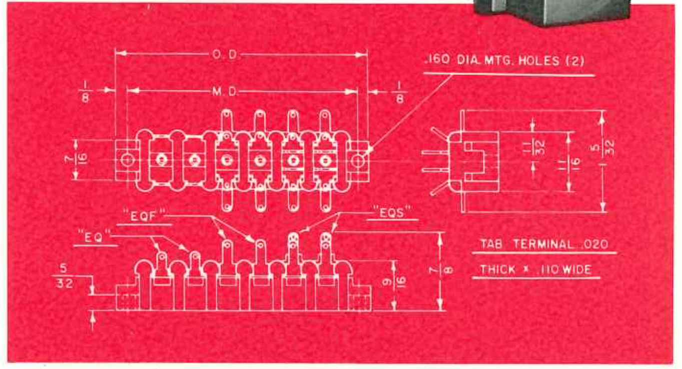


Curtis EQ Series gives you choice of 2, 4 or 6 push-on quick disconnect tab terminals. Quick disconnect tab terminals are .020 thick by .110 wide. Molded parts are all of black thermo-setting phenolic per MIL-M-14F Type CFG, MIL-P-10420 Class 2.

Rated:
- **EQ** — 7 amperes, 300 volts.
- **EQF** — 15 amperes total, 300 volts.
- **EQS** — 15 amperes total, 300 volts.

Terminals:
- **EQ** — Two .020 thick by .110 wide quick disconnect male tab terminals per pole.
- **EQF** — Four .020 thick by .110 wide quick disconnect male tab terminals per pole.
- **EQS** — Six .020 thick by .110 wide quick disconnect male tab terminals per pole.

Wire — Up to #16 AWG wire.
Mounting Holes — .160 dia. for use with #5 mounting screw.
Available — 1-22 terminals per block.



DIMENSIONS AND PRICES FOR CURTIS TYPES "EQ", "EQF" AND "EQS" TERMINAL BLOCKS

Number of Terminals	LIST PRICES			Mounting Dimensions† Inches	Overall Dimensions† Inches
	EQ	EQF	EQS		
1	$ .17	$ .19	$ .21	3/4	1
2	.25	.28	.31	1 1/8	1 3/8
3	.34	.38	.42	1 1/2	1 3/4
4	.42	.48	.53	1 7/8	2 1/8
5	.51	.58	.64	2 1/4	2 1/2
6	.59	.68	.75	2 5/8	2 7/8
7	.68	.78	.86	3	3 1/4
8	.76	.88	.97	3 3/8	3 5/8
9	.85	.98	1.08	3 3/4	4
10	.93	1.08	1.19	4 1/8	4 3/8
11	1.02	1.18	1.30	4 1/2	4 3/4
12	1.10	1.28	1.41	4 7/8	5 1/8
13	1.19	1.38	1.52	5 1/4	5 1/2
14	1.27	1.48	1.63	5 5/8	5 7/8
15	1.36	1.58	1.74	6	6 1/4
16	1.44	1.68	1.85	6 3/8	6 5/8
17	1.53	1.78	1.96	6 3/4	7
18	1.61	1.88	2.07	7 1/8	7 3/8
19	1.70	1.98	2.18	7 1/2	7 3/4
20	1.78	2.08	2.29	7 7/8	8 1/8
21	1.87	2.18	2.40	8 1/4	8 1/2
22	1.95	2.28	2.51	8 5/8	8 7/8

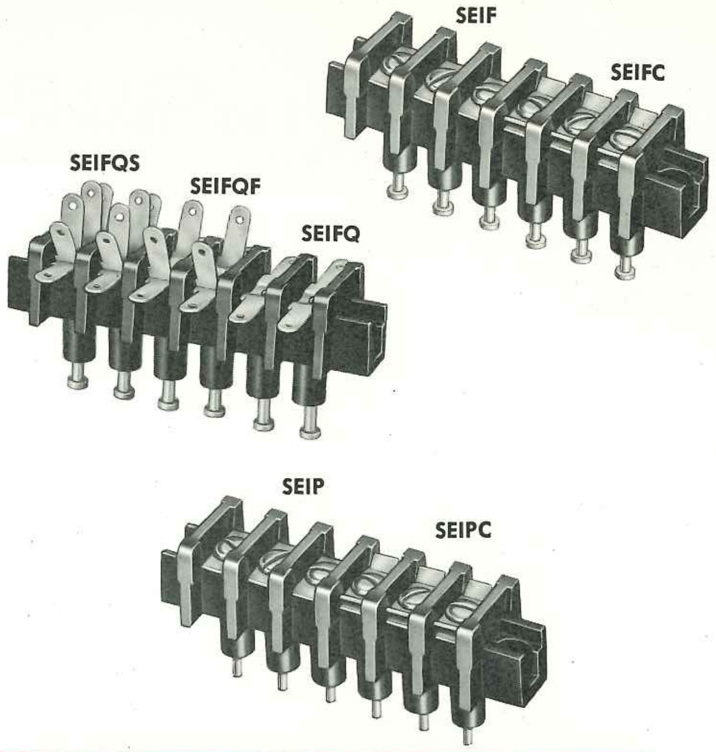
†Mounting and overall dimensions above have ± 1/32 tolerance.

AMP #110 FEMALE RECEPTACLES	CATALOG NO.	WIRE SIZE	INSULATION DIA.
Insulation Support	42067-1 42068-1	24-22 22-18	.040/.060 .060/.100
Non-Insulation Support	42399-1	20-18	
Insulating sleeve for #110 female receptacle #380481-1			

NOTE: Female terminals also available from Malco Mfg. Co., 4025 W. Lake St., Chicago, Ill. 60620; and Thomas & Betts Co., Inc., Elizabeth, N. J.

CURTIS SEI-Series

Miniature Insulated TERMINAL BLOCKS



The Curtis SEI-Series miniature terminal blocks offer insulated feed-thru with 1/4" insulation to ground when mounted on 1/16" chassis. Blocks are of molded black thermo-setting phenolic with 1/4" center-to-center terminal spacing. All types are available in 1-18 pole lengths, with #2-56 terminal screws or .110 quick-disconnect terminals.

Rated — 5 amperes, 300 volts.

Terminals:

- **SEIF** — Insulated feed-thru type with #2-56 terminal screws on each pole. Internal turret-type solder connections. Screw machine inserts are bright tin plated for excellent solderability and shelf life.
- **SEIP** — Same as SEIF, except internal connections are .047 dia. pins for soldering to PRINTED CIRCUIT BOARDS.

Wire — Up to #16 AWG.

Mounting Holes* — Integrally molded into base .116 diameter. See drawing for screw recommendations.

Available — 1-18 terminals per block.

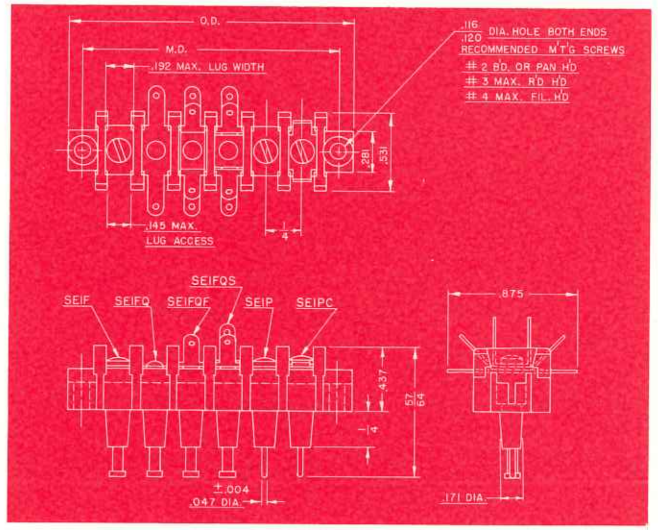
All SEI-Series blocks are available with the following optional surface connections by designating the proper suffix.

SUFFIX:

- **C — Surface clamp which eliminates lugging or looping of wires.**
- **Q — Two (2) .110 quick-disconnect tab terminals per pole.**
- **QF — Four (4) .110 quick-disconnect tab terminals per pole.**
- **QS — Six (6) .110 quick-disconnect tab terminals per pole.**

NOTE: Quick-disconnect tab terminals are .016 thick by .110 wide. For #110 Female Receptacle Sources, refer to page 21.

***NOTE:** *All blocks available with mounting position removed at no extra cost. Use suffix R. O.D. is then reduced by 5/16". (e.g. SEIFR-4)*



DIMENSIONS AND PRICES FOR CURTIS SEI-SERIES TERMINAL BLOCKS

Number of Terminals	LIST PRICES**					Mounting Dimensions† Inches	Overall Dimensions† Inches
	SEIF and SEIP	SEIFC and SEIPC	SEIFQ	SEIFQF	SEIFQS		
1	$ .30	$ .33	$ .31	$ .32	$ .33	1/2	11/16
2	.50	.56	.52	.54	.56	3/4	15/16
3	.70	.79	.73	.76	.79	1	1 3/16
4	.90	1.02	.94	.98	1.02	1 1/4	1 7/16
5	1.10	1.25	1.15	1.20	1.25	1 1/2	1 11/16
6	1.30	1.48	1.36	1.42	1.48	1 3/4	1 15/16
7	1.50	1.71	1.57	1.64	1.71	2	2 3/16
8	1.70	1.94	1.78	1.86	1.94	2 1/4	2 7/16
9	1.90	2.17	1.99	2.08	2.17	2 1/2	2 11/16
10	2.10	2.40	2.20	2.30	2.40	2 3/4	2 15/16
11	2.30	2.63	2.41	2.52	2.63	3	3 3/16
12	2.50	2.86	2.62	2.74	2.86	3 1/4	3 7/16
13	2.70	3.09	2.83	2.96	3.09	3 1/2	3 11/16
14	2.90	3.32	3.04	3.18	3.32	3 3/4	3 15/16
15	3.10	3.55	3.25	3.40	3.55	4	4 3/16
16	3.30	3.78	3.46	3.62	3.78	4 1/4	4 7/16
17	3.50	4.01	3.67	3.84	4.01	4 1/2	4 11/16
18	3.70	4.24	3.88	4.06	4.24	4 3/4	4 15/16

***Discounts are per DS-139, 139R, 151 and 152.**

†Mounting and overall dimensions above have ± 1/32 tolerance.

CURTIS SE-Series
Miniature
TERMINAL BLOCKS

The Curtis SE-Series offers choice of surface, feed-thru and printed circuit blocks with a wide selection of terminal arrangement. All SE-Series blocks are of molded black thermo-setting phenolic, have compact ¼" center-to-center terminal spacing, and are available in 1-18 pole lengths, with #2-56 terminal screws or .110 quick-disconnect terminals.

Rated — 5 amperes, 300 volts.

Terminals:

SES — Surface type with #2-56 terminal screw on each pole.

SEF — Feed-thru type with #2-56 terminal screw on each pole. Internal turret-type connections. Screw machine inserts are bright tin plated for excellent solderability and shelf life.

SEP — Same as SEF, except internal connections are .047 dia. pins for soldering to PRINTED CIRCUIT BOARDS.

Wire — Up to #16 AWG.

Mounting Holes* — Integrally molded into base .116 diameter. See drawing for screw recommendations.

Available — 1-18 terminals per block.

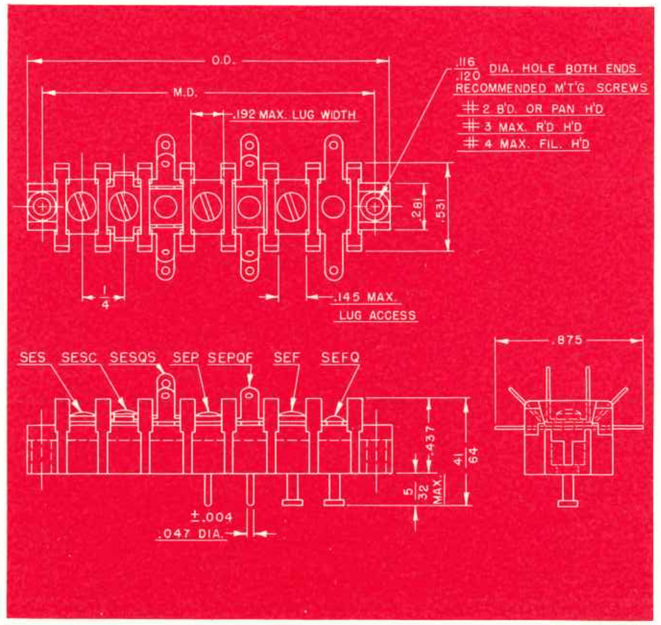
All SE-Series blocks are available with the following optional surface connections by designating the proper suffix.

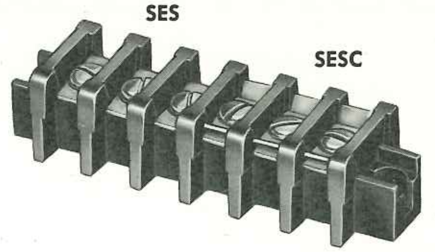
SUFFIX:

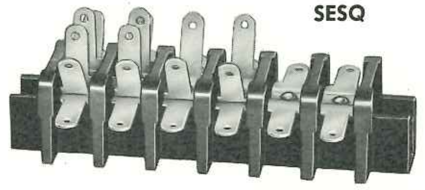
- **C** — Surface clamp which eliminates lugging or looping of wires.
- **Q** — Two (2) .110 quick-disconnect tab terminals per pole.
- **QF** — Four (4) .110 quick-disconnect tab terminals per pole.
- **QS** — Six (6) .110 quick-disconnect tab terminals per pole.

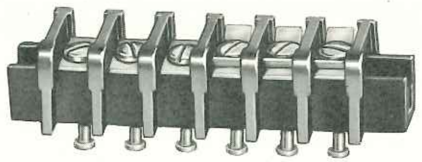
NOTE: Quick-disconnect tab terminals are .016 thick by .110 wide. For #110 Female Receptacle Sources, refer to page 21.

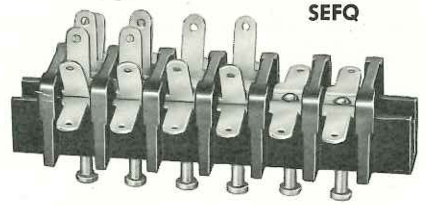
> ***NOTE:** *All blocks available with mounting position removed at no extra cost. Use suffix R. O.D. is then reduced by 5/16". (e.g. SEPCR-4)*

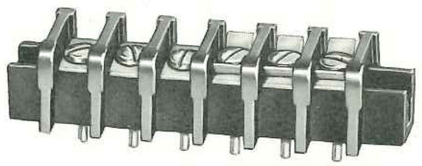


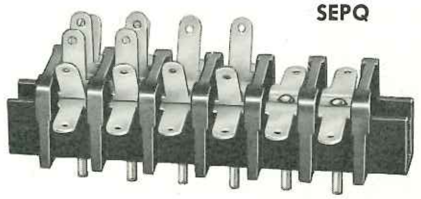












DIMENSIONS AND PRICES FOR CURTIS SE-SERIES TERMINAL BLOCKS

Number of Terminals	LIST PRICES**										Mounting Dimen.† Inches	Overall Dimen.† Inches
	SES	SESC	SESQ	SESQF	SESQS	SEP SEF	SEPC SEFC	SEPQ SEFQ	SEPQF SEFQF	SEPQS SEFQS		
1	$ .22	$ .25	$ .23	$ .24	$ .25	$ .27	$ .30	$ .28	$ .29	$ .30	1/2	11/16
2	.34	.40	.36	.38	.40	.44	.50	.46	.48	.50	3/4	15/16
3	.46	.55	.49	.52	.55	.61	.70	.64	.67	.70	1	1 3/16
4	.58	.70	.62	.66	.70	.78	.90	.82	.86	.90	1 1/4	1 7/16
5	.70	.85	.75	.80	.85	.95	1.10	1.00	1.05	1.10	1 1/2	1 11/16
6	.82	1.00	.88	.94	1.00	1.12	1.30	1.18	1.24	1.30	1 3/4	1 15/16
7	.94	1.15	1.01	1.08	1.15	1.29	1.50	1.36	1.43	1.50	2	2 3/16
8	1.06	1.30	1.14	1.22	1.30	1.46	1.70	1.54	1.62	1.70	2 1/4	2 7/16
9	1.18	1.45	1.27	1.36	1.45	1.63	1.90	1.72	1.81	1.90	2 1/2	2 11/16
10	1.30	1.60	1.40	1.50	1.60	1.80	2.10	1.90	2.00	2.10	2 3/4	2 15/16
11	1.42	1.75	1.53	1.64	1.75	1.97	2.30	2.08	2.19	2.30	3	3 3/16
12	1.54	1.90	1.66	1.78	1.90	2.14	2.50	2.26	2.38	2.50	3 1/4	3 7/16
13	1.66	2.05	1.79	1.92	2.05	2.31	2.70	2.44	2.57	2.70	3 1/2	3 11/16
14	1.78	2.20	1.92	2.06	2.20	2.48	2.90	2.62	2.76	2.90	3 3/4	3 15/16
15	1.90	2.35	2.05	2.20	2.35	2.65	3.10	2.80	2.95	3.10	4	4 3/16
16	2.02	2.50	2.18	2.34	2.50	2.82	3.30	2.98	3.14	3.30	4 1/4	4 7/16
17	2.14	2.65	2.31	2.48	2.65	2.99	3.50	3.16	3.33	3.50	4 1/2	4 11/16
18	2.26	2.80	2.44	2.62	2.80	3.16	3.70	3.34	3.52	3.70	4 3/4	4 15/16

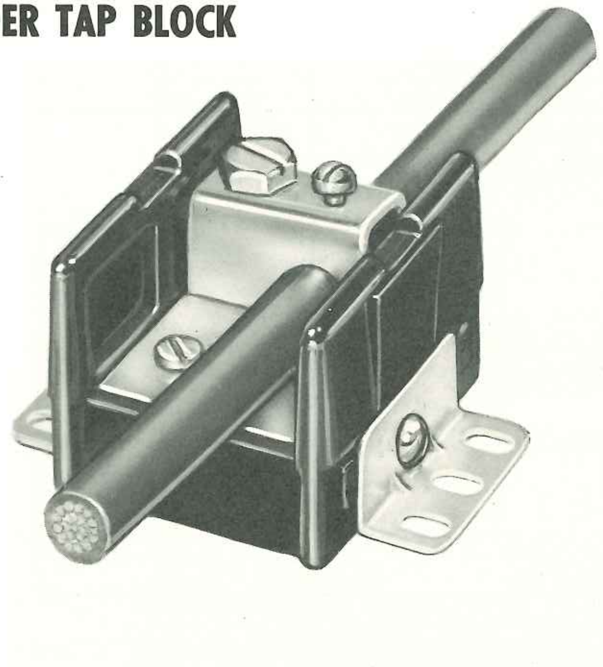
*****Discounts are per DS-139, 139R, 151 and 152.***

†Mounting and overall dimensions above have ± 1/32 tolerance.

AMP #110 FEMALE RECEPTACLES	CATALOG NO.	WIRE SIZE	INSULATION DIA.
Insulation Support	42847-1	30-28	.030
	42415-1	24-22	.040/.060
	42415-2	24-22	.040/.060
	42415-3	24-22	.040/.060
	60118-1	22-18	.060/.100
Non-Insulation Support	42398-1	20-18	

NOTE: Female terminals also available from Malco Mfg. Co., 4025 W. Lake St., Chicago, Ill. 60620; and Thomas & Betts Co., Inc., Elizabeth, N. J.

CURTIS
Type "O" FEEDER TAP BLOCK



Reduce costs by eliminating the necessity of cutting the feeder and/or removing insulation to take off a tap. To make the electrical connection, simply clamp down feeder and then drive the cone pointed tap screw through the insulation and into the copper of the feeder. The actual tap-off point is the #8 screw on the terminal plate. The terminal plate is insulated from ground with clearances in excess of ½" over surface and through air.

Rated — 600 volts, 25 amperes (Max. current transfer to tap).
Terminals — Bars and clamp — 100% pure copper nickel plated.
Wire — Block is designed for #1 AWG feeder.
Molded Parts — Black general purpose phenolic rated 300° F.
Mounting Brackets — Aluminum.
Screws:
  Clamp Screw — 5/16 hex head steel nickel plated.
  Tap and Cone Point — #8-32 brass nickel plated.
M.D. — 2 7/8"
O.D. — 3 3/8"

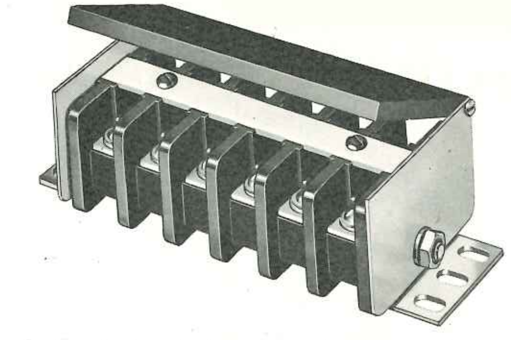
For overall dimensions, refer to Curtis O Block page 4 of catalog.

LIST PRICE $2.85/Each

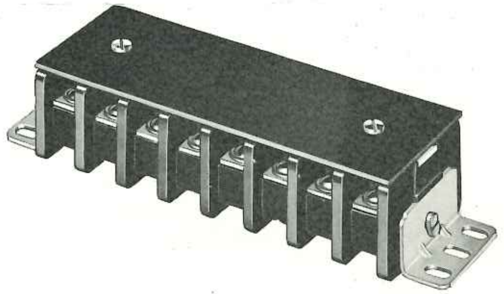
Discounts are in accordance with discount sheets DS-139, 139R, 151 and 152.

Curtis Terminal Blocks Cat. No. 667, 1967 P.22

CURTIS
TERMINAL BLOCK COVERS & JUMPERS



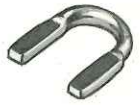
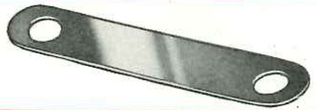
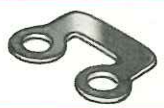
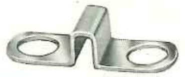
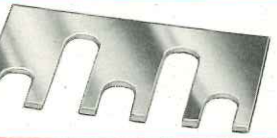
Hinged cover: Available on BT, H, CDM and CT Terminal Blocks. Cover is 3/16 thick black phenolic and pivots from a special end bracket at each end of the terminal block, providing ready access to the block.



Plain cover: Available on T, U, L, O, S, BT, H, CDM, CT, M, MT, MA and MAT Terminal Blocks. Cover is made of 1/16 black phenolic and is fastened at each end of the terminal block with one screw for permanent positioning and quick removal.

For prices on Terminal Blocks with Covers, please contact factory, indicating type of block(s), number of terminals or poles, and quantity required.

TERMINAL BLOCK JUMPERS

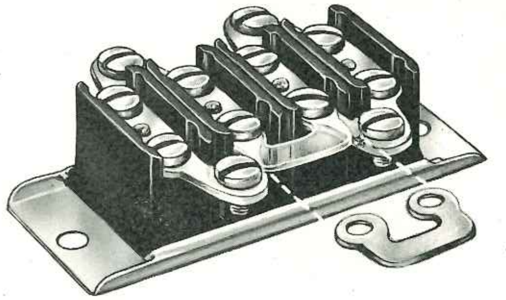
	TYPE	PRICES
	WT WTC DRG. 271-A18	LIST/C PCS. $6.50*
	CDM DRG. 523-A91	LIST/C PCS. $7.00
	M MAT MT J MA K DRG. 258-A5	LIST/C PCS. $1.65
	GFT DRG. 267-A28	LIST/EACH $ .05
	GFT Available 3-18 poles DRG. 267-A42	LIST/POLE $ .08

Discounts are per DS-139, 139-R, 151 and 152.

**When W-Series Jumper is purchased with W-Parts, discount is that earned for terminal assemblies on the same order.*

CURTIS
Type "J" JUNCTION BLOCK

Provides up to 71 taps from a single incoming lead. Can be combined at random with Type "M" and "MA" terminal blocks in the same mounting channel for utmost flexibility.



Rated — 30 amperes (total incoming rating) 300 volts.

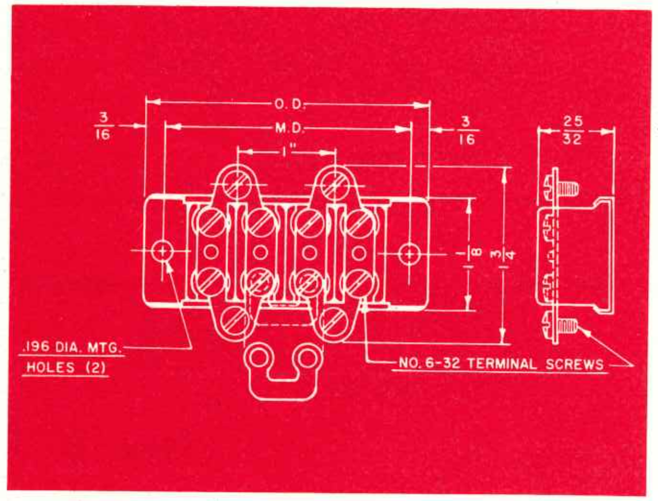
Terminals — Provides 6 No. 6/32 screws on a 16 gauge brass terminal bar, (multiples can be jumpered together).

Wire — Up to #14 AWG w/o lugs. #10 AWG with lugs.

Molded Parts — Black thermo-setting phenolic.

Mounting — Steel channel, nickel plated, crimped to lock terminals in place.

Available — 1 to 12 terminals per block, 5 to 71 taps.



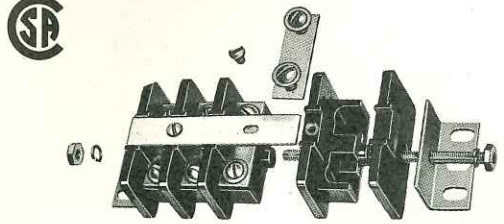
PRICE LIST

Catalog No.	Mounting Dimension Inches	Overall Dimension Inches	List Price
J-1	1½	1⅞	$0.43
J-2	2½	2⅞	0.83
J-3	3½	3⅞	1.23
J-4	4½	4⅞	1.63
J-5	5½	5⅞	2.03
J-6	6½	6⅞	2.43
J-7	7½	7⅞	2.83
J-8	8½	8⅞	3.23
J-9	9½	9⅞	3.63
J-10	10½	10⅞	4.03
J-11	11½	11⅞	4.43
J-12	12½	12⅞	4.83

CURTIS
Build-Up
Terminal Block Kits

Make your own Curtis Terminal Blocks for experimental work, emergency jobs and general maintenance installations.

CURTIS Type "B"
BUILD-UP TERMINAL BLOCK KITS

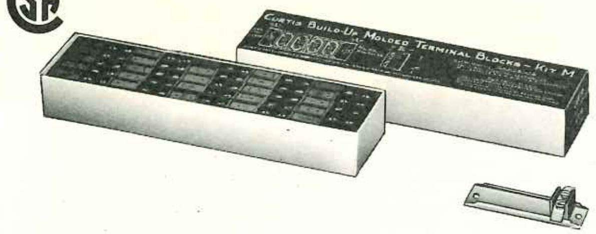


For construction of Type "BT" Blocks, with 1 to 14 terminals. (See Page 5 for dimensions and ratings.) Includes all necessary molded sections and easy-to-follow, illustrated instructions. Determine number of "B-200" Kits you require by dividing total desired terminals by 50. Determine number of "No. 201" Kits required by dividing number of blocks by 5.

"B-200" Terminal Block Kit
Contains 50 terminal sections.
List Price.......................... $11.40

"No. 201" Terminal Block Kit
Contains mounting and assembly hardware for five blocks. List Price................ $ 2.64

CURTIS Types "M" and "MT"
BUILD-UP TERMINAL BLOCK KITS



For building up an assortment of terminal blocks either Type "M" or Type "MT" depending on the Kit selected. Type "MT" Terminals provide marking tags, but are otherwise identical to Type "M". (See Page 14 for dimensions and ratings.)

Insulation is provided by the phenolic moldings with blind holes for the screws, preventing leakage paths or shorts to the channel or ground.

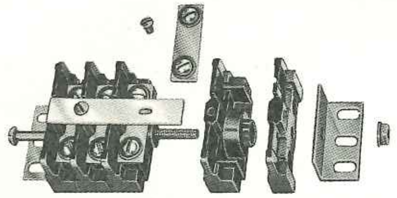
Type "M" and "MT" Kits

Each kit contains 50 terminal sections and two channels of these sizes: 2, 3, 4, 5, 6, 8, 10 and 12.

Type "M" Terminal Block Kit
List Price $9.35

Type "MT" Terminal Block Kit
List Price $9.82

CURTIS Type "CDM" and "CT"
BUILD-UP TERMINAL BLOCK KITS



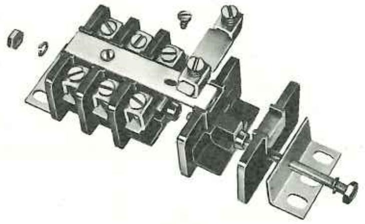
For construction of Type "CT" or "CDM" Blocks, with 1 to 16 terminals. (See page 10 for dimensions and ratings.) Includes all necessary molded sections and complete instructions. Determine number of "CT" or "CDM-100" Kits you require by dividing total terminals by 50. Determine number of "CDM-101" Kits required by dividing number of blocks by 5.

"CT-100" Terminal Block Kit
Contains 50 terminal sections.
List Price...................... $14.44

"CDM-100" Terminal Block Kit
Contains 50 terminal sections.
List Price........................ $10.85

"CDM-101" Terminal Block Kit
Contains mounting and assembly hardware for five blocks. List Price................. $2.30

CURTIS Type "H"
BUILD-UP TERMINAL BLOCK KITS



For construction of Type "H" Blocks, with 1 to 14 terminals. (See Page 5 for dimensions and ratings.) Includes all necessary molded sections and complete instructions. Interchangeable with Type "H", Type "BT" Terminals can be assembled at any point in the block where their 30 ampere rating is adequate and terminal screws are preferred. Determine number of H-300 Kits required by dividing total number of terminals by 50. Determine number of No. 201 Kits required by dividing number of blocks by 5.

"H-300" Terminal Block Kit
Contains 50 terminal sections.
List Price $16.10

"No. 201" Terminal Block Kit
Contains mounting and assembly hardware for five blocks. List Price................. $2.64

THE CURTIS POLICY

The policy of our organization is to provide the foremost engineering skill, a background of seasoned experience and facilities, for the dependable and economical solution to your terminal block problems. Since 1933, our company has engineered and manufactured components for some of the largest concerns in the country. Our ability to produce is backed by satisfied customers of national and international reputation.

CURTIS DEVELOPMENT & MFG. CO.
3266 N. 33RD STREET
MILWAUKEE, WISCONSIN 53216
AREA CODE 414 • 445-1817
TWX 910-262-3125

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....

( ) Please have your representative call.

( ) Additional comments ....

....

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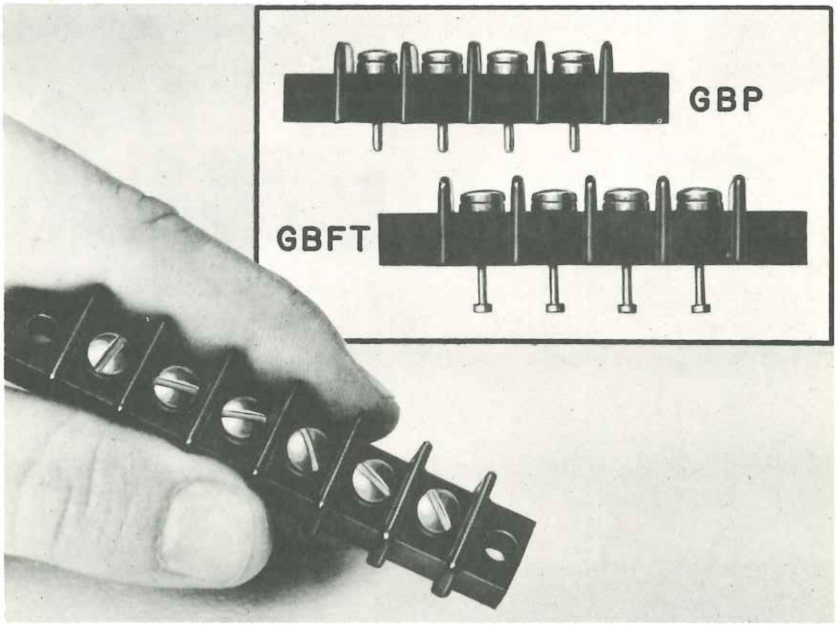
City.. Zip or Zone................ State........................

CURTIS

BULLETIN DS-168

FEBRUARY, 1967

GB-Series (FEED-THRU)
TERMINAL BLOCKS



This new adaptation of the popular GFT-Series terminal blocks offers a flat base, feed-thru block with either a turret-type solder terminal or a printed circuit pin for internal connection.

FEATURES

Rated: 20 amperes, 300 volts.

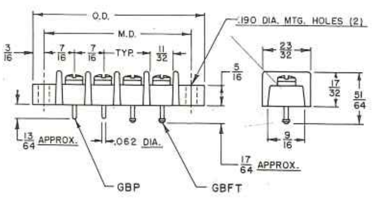
Terminals: Bright tin plated for ease in soldering and excellent shelf life.

- **External** — #6-32 nickel plated screw connections. (#8-32 screw available)
- **Internal** — GBFT, insert with turret-type solder connections. GBP, insert with .062 dia. printed circuit pin.

Wire: Up to one #12 AWG wire. CSA requires use of lugs for wire larger than #16 AWG.

Molded Parts: Black thermosetting phenolic.

Available: 1 to 18 terminals.



DIMENSIONS and PRICES

CURTIS GB-SERIES (FEED-THRU) TERMINAL BLOCKS

No. of Terminals	Mounting Dimensions† Inches (M.D.)	Overall Dimensions† Inches (O.D.)	List Price* Each GBFT or GBP
1	7/8	1 1/4	$0.17
2	1 5/16	1 11/16	0.31
3	1 3/4	2 1/8	0.45
4	2 3/16	2 9/16	0.59
5	2 5/8	3	0.73
6	3 1/16	3 7/16	0.87
7	3 1/2	3 7/8	1.01
8	3 15/16	4 5/16	1.15
9	4 3/8	4 3/4	1.29
10	4 13/16	5 3/16	1.43
11	5 1/4	5 5/8	1.57
12	5 11/16	6 1/16	1.71
13	6 1/8	6 1/2	1.85
14	6 9/16	6 15/16	1.99
15	7	7 3/8	2.13
16	7 7/16	7 13/16	2.27
17	7 7/8	8 1/4	2.41
18	8 5/16	8 11/16	2.55

†Mounting and overall dimensions above have ±1/32 tolerance.

**Discounts are per DS-139, 139R, 151 and 152.*

TERMS: *F.O.B. our plant, Milwaukee, Wisconsin. Net 30 days to concerns with approved rating in Dun & Bradstreet.*

CURTIS DEVELOPMENT & MFG. CO.

3266 NORTH 33rd STREET • MILWAUKEE, WISCONSIN 53216
PHONE: 414 • 445-1817 • TWX 910-262-3125

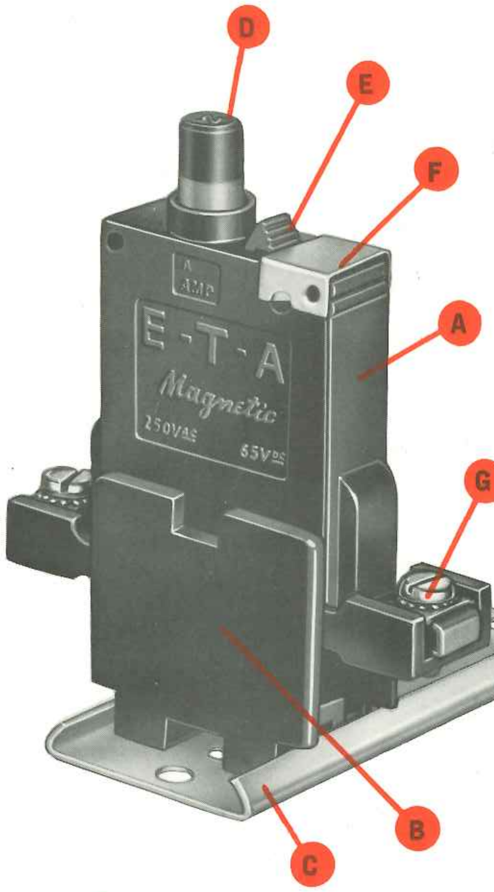
E-T-A/CURTIS

BULLETIN DS-169

CIRCUIT BREAKER MODULES

Protect your branch circuits the safe, modern, convenient way with the new combination of a reliable single pole E-T-A circuit breaker and a standard Curtis W-series track-mounted terminal block assembly.

Your choice of over 25 models with standard ratings from 0.1 to 15 amps and voltages up to 250 V. AC. Allow positive branch circuit protection without the need of replacing blown-out fuses. These circuit breaker modules can be mounted on the same track in your control panel with all the other Curtis W-series terminal blocks to offer a complete, compact terminal system with easy insertion and connection. Each circuit breaker button is clearly marked with the amperage rating to eliminate overloading of circuitry and can be used as a manual on-off switch when required.



A	E-T-A thermal magnetic circuit breaker.
B	Curtis W-series track-mounted terminal block assembly.
C	Curtis mounting track.
D	Reset button with 2-color trip indicator and imprinted current rating.
E	Manual release.
F	Circuit marking plate.
G	Captivated 3 piece terminal clamp assembly.

FEATURES

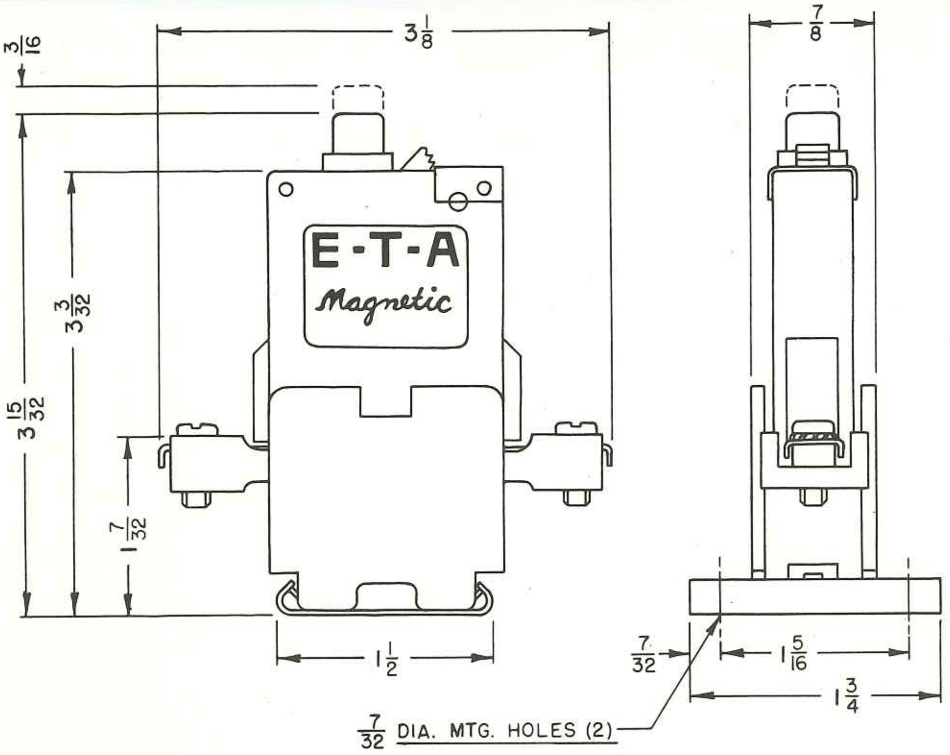
1. **Replaces fuses. Just snap in your circuit breaker module and eliminate all fuse replacement problems.**
2. **Fits in same space as terminal blocks equipped with standard fuse holder clip. Easy for up-dating the protection of your equipment from fuses to modern circuit breakers.**
3. **Prevents component burn-outs caused by replacement of wrong fuse rating. Simply press reset button to restore circuit at once. Equipment warranty is protected because the rating of the circuit breaker cannot be changed.**
4. **Trip indication through two color button helps to locate electrical faults faster, cutting downtime.**
5. **Trip free, cannot be held closed against an overload.**
6. **Manual on-off switch is built in.**
7. **Short circuit capacity of 200 amps at voltages up to 250 V. AC.**
8. **Standard ratings from 0.1 to 15 amp.**
9. **Quick vertical snap-in insertion of track-mounted assembly and captivated terminal clamp assembly allows minimum circuit hook-up time.**

APPLICATIONS

The E-T-A/Curtis circuit breaker module provides an up-to-date method for branch circuit protection in automated machinery and all types of electrical equipment. This circuit breaker module replaces fuses and can be track-mounted side by side with a great variety of terminal blocks. The correctly rated circuit breaker module eliminates component burn-outs caused by replacing a fuse with one of a higher rating. The built-in manual on-off switch provides a safe and convenient means of interrupting energized circuits for maintenance, testing, or other purposes.

E-T-A/CURTIS CIRCUIT BREAKER MODULES

DIMENSIONS



ETA BREAKER SHOWN
MOUNTED IN A CURTIS
W SERIES TERMINAL
BLOCK TRACK

CONFIGURATIONS and PRICE LIST of Standard Assemblies

MODEL	RATING AMPS	MODEL	RATING AMPS	MODEL	RATING AMPS	QUANTITY	PRICE	
							Rating of 0.1 through 6.0 amps	Rating of 6.5 through 15.0 amps
43-200-MO-0.1	0.1	43-200-MO-1.2	1.2	43-200-MO- 5.0	5.0	1	$4.23	$4.53
43-200-MO-0.2	0.2	43-200-MO-1.5	1.5	43-200-MO- 5.5	5.5	10	3.59	3.89
43-200-MO-0.3	0.3	43-200-MO-1.8	1.8	43-200-MO- 6.0	6.0	50	3.38	3.68
43-200-MO-0.4	0.4	43-200-MO-2.0	2.0	43-200-MO- 6.5	6.5	100	3.22	3.52
43-200-MO-0.5	0.5	43-200-MO-2.5	2.5	43-200-MO- 7.0	7.0	250	3.08	3.38
43-200-MO-0.6	0.6	43-200-MO-3.0	3.0	43-200-MO- 8.0	8.0	500	2.99	3.29
43-200-MO-0.7	0.7	43-200-MO-3.5	3.5	43-200-MO-10.0	10.0	1000	2.85	3.15
43-200-MO-0.8	0.8	43-200-MO-4.0	4.0	43-200-MO-12.0	12.0	2500	2.75	3.05
43-200-MO-1.0	1.0	43-200-MO-4.5	4.5	43-200-MO-15.0	15.0			

NOTE: Dimensions same for all models. Quantity prices listed apply separately to each rating ordered. For further information contact your nearest E-T-A Products Co. of America or Curtis Development & Mfg. Co. representative, or contact either factory.

All prices are NET EACH. *DELIVERY: 4 to 6 weeks.* *TERMS: F.O.B. Curtis plant, Milwaukee, Wisconsin. Net 30 days to concerns with approved rating in Dun & Bradstreet.*

CURTIS DEVELOPMENT & MFG. CO.

3266 NORTH 33rd STREET • MILWAUKEE, WISCONSIN 53216
PHONE: 414 • 445-1817 • TWX 910-262-3125

® 267

SEE REVERSE SIDE FOR REPRESENTATIVE LISTING

DISCOUNT SHEET

EFFECTIVE DECEMBER 1, 1963

STANDARD DISCOUNT SCHEDULE

THE **STANDARD DISCOUNT** APPLIES TO ALL TERMINAL BLOCKS AND KITS SHOWN IN THE **CATALOG.** THE DISCOUNT IS DETERMINED FOR EACH ORDER BY THE TOTAL LIST PRICE OF TERMINAL BLOCKS AND KITS.

TOTAL LIST PRICE	DISCOUNT	MULTIPLIER
Up to $10.00 List	——	1.00
$10.00 to $24.99 List	10%	.90
$25.00 to $49.99 List	25%	.75
$50.00 to $149.99 List	30%	.70
$150.00 to $249.99 List	32%	.68
$250.00 to $999.99 List	34%	.66
$1,000.00 to $2,999.99 List	35%	.65
$3,000.00 & Above	37%	.63

QUANTITY DISCOUNT SCHEDULE

THE **QUANTITY DISCOUNT** SCHEDULE WILL ALWAYS APPLY TO A TERMINAL BLOCK ITEM, IN A QUANTITY OF 1,000 AND ABOVE, REGARDLESS OF DOLLAR LIST VOLUME.

IF A TERMINAL BLOCK ITEM OF AN ORDER IS SPECIFIED IN A QUANTITY OF 1,000 AND ABOVE, THE QUANTITY DISCOUNT SCHEDULE MUST APPLY. THE STANDARD DISCOUNT SCHEDULE MUST APPLY FOR ITEMS OF THE SAME ORDER THAT ARE BELOW A QUANTITY OF 1,000.

THE **QUANTITY DISCOUNT** APPLIES TO ALL TERMINAL BLOCKS AND KITS SHOWN IN THE **CATALOG.** THE DISCOUNT IS DETERMINED INDIVIDUALLY FOR EACH ITEM OF AN ORDER.

QUANTITY	DISCOUNT	MULTIPLIER
1,000 — 1,999	**37%**	**.63**
2,000 — 4,999	**40%**	**.60**
5,000 — 9,999	**44%**	**.56**
10,000 — 24,999	**48%**	**.52**
25,000 — 49,999	**51%**	**.49**
50,000 & Above	**Available on Request**	

STANDARD CONDITIONS OF SALE

TERMS: Terms to Concerns having satisfactory credit rating are 30 days Net from date of invoice.

CREDIT: Regular terms for Concerns carrying satisfactory rating in Dun & Bradstreet.

MINIMUM BILLING CHARGE: Orders totaling less than $5.00 will be billed at a minimum of $5.00.

SHIPPING TERMS: Our regular terms are F. O. B. our plant, Milwaukee, Wisconsin.

CATALOG PRICES AND DISCOUNTS: Prices and discounts appearing in any Catalogs, Catalog Sheets or Discount Sheets are subject to change without notice.

RETURNED GOODS: Written permission must be obtained before returning merchandise for any reason. We will be obliged to refuse receipt of goods returned without permission.

CURTIS DEVELOPMENT & MFG. CO.

3266 North 33rd Street Milwaukee, Wisconsin 53216

SEE REVERSE SIDE FOR DISCOUNT INFORMATION

LOCATION CHART — CURTIS REPRESENTATIVES AND MANUFACTURING FACILITIES

1. To find the name and address of your Curtis Sales Engineer, find the key number of your location in the Location Chart.
2. The key number next to your location will give you the name of your Curtis Representative in the table at the bottom of the page.

5. ALABAMA
22. ALASKA
21. ARIZONA
1. ARKANSAS
CALIFORNIA
6. Northern Half, bounded by and excluding Counties of San Luis Obispo, Kern and San Bernardino.
8. Southern Half, bounded by and including above counties, but excluding San Diego County.
31. San Diego County only.
21. COLORADO
12. CONNECTICUT
18. DELAWARE
19. DISTRICT OF COLUMBIA
5. FLORIDA
5. GEORGIA
9. HAWAII
22. IDAHO
ILLINOIS
4. Northern Half, bounded by and excluding Counties of Adams, Brown, Morgan, Macoupin, Montgomery, Christian, Shelby, Moultrie, Douglas and Edgar.
15. Southern Half, bounded by and including above counties.
INDIANA
25. Excluding Lake and Porter counties.
4. Lake and Porter Counties ONLY.
14. IOWA
1. KANSAS
25. KENTUCKY
10. LOUISIANA
11. MAINE
19. MARYLAND
11. MASSACHUSETTS
MICHIGAN
3. Entire Lower Peninsula; Chippewa, Luce and Mackinac Counties of Upper Peninsula.
27. Upper Peninsula, excluding above counties.
13. MINNESOTA
MISSISSIPPI
5. Northern Half, bounded by and excluding Counties of Issaquena, Sharkey, Yazoo, Leake, Madison, Neshoba and Kemper.
10. Southern Half, bounded by and including above counties.
MISSOURI
1. Western Half, bounded by and excluding Counties of Scotland, Knox, Shelby, Monroe, Audrain, Boone, Maries, Phelps, Dent, Shannon and Oregon.
15. Eastern Half, bounded by and including above counties.
22. MONTANA
14. NEBRASKA
8. NEVADA
11. NEW HAMPSHIRE
NEW JERSEY
17. Northern, including Monmouth but not Mercer County.
18. Southern, including Mercer but not Monmouth County.
21. NEW MEXICO
NEW YORK
17. New York City Area, including Westchester and Rockland Counties, and Long Island.
24. State of New York, excluding Westchester and Rockland Counties, and Long Island.
20. NORTH CAROLINA
13. NORTH DAKOTA
OHIO
25. Main Office
26. Branch Office
1. OKLAHOMA
22. OREGON
PENNSYLVANIA
18. Eastern Half, bounded by the western extremities of the Counties of Tioga, Lycoming, Union, Snyder, Juniata and Franklin.
16. Western Half, bounded by the western extremities of the above Counties.
11. RHODE ISLAND
20. SOUTH CAROLINA
13. SOUTH DAKOTA
5. TENNESSEE
2. TEXAS
21. UTAH
11. VERMONT
VIRGINIA
19. North of Harrisonburg
20. South of Harrisonburg
22. WASHINGTON
16. WEST VIRGINIA
27. WISCONSIN
21. WYOMING

FOREIGN PLANTS AND OFFICES

23. CANADA (Manufacturing Facility)
28. UNITED KINGDOM (Manufacturing Facility)
29. FRANCE (Sales Office)
30. SOUTH AFRICA (Sales Office)

CURTIS REPRESENTATIVES & MANUFACTURING FACILITIES

1. **AUTOMATIC GENERAL ELECTRONICS SALES, INC.**
6550-E Troost Avenue
Kansas City, Missouri 64131
816–333–8206

2. **R. F. KIMBALL COMPANY**
5531 Dyer Street
Dallas, Texas 75206
214–361–6067

3. **HILLTRONICS, Inc.**
13720 Puritan Avenue
Detroit, Michigan 48227
313–342–3242

4. **BAUMAN & BLUZAT**
3014 N. Pulaski Road
Chicago, Illinois 60641
312–761–3630

5. **BUCHANAN & ABRAMS ASSOCIATES, INC.**
1512 E. Concord Avenue
Orlando, Florida 32803
305–423–8995

6. **J. F. CADY COMPANY**
Sales Mart Building
1485 Bayshore Boulevard
San Francisco, California 94124
415–467–8656

7. **CONDUCTORES Y ACCESSORIOS, S.A.**
Lerma 345–102 – Apdo. Postal 5-316
Mexico 5 D.F.
903–11–57–81

8. **PENWARDEN ASSOCIATES, INC.**
14547 Titus Street
Van Nuys, California 91402
213-782-4920

9. **DOUGHERTY ENTERPRISES**
1164 Waimanu Street
Honolulu, Hawaii

10. **CONTACT FACTORY**

11. **GLENN M. HATHAWAY ELECTRONICS, INC.**
(Main Office)
7–11 Mystic Street
Arlington, Massachusetts 02174
617–646–1380

12. **GLENN M. HATHAWAY ELECTRONICS, INC.**
(Branch Office)
Ducillo Building
Canaan, Connecticut 06018
203–824–7215

13. **THE HEIMANN COMPANY, INC.**
5603 Lyndale Ave. South
Minneapolis, Minnesota 55419
612–827–5457

14. **THE HEIMANN COMPANY, INC.**
236 Seventh Ave., North
Fort Dodge, Iowa 50501
515–576–2374

15. **KATTELMAN & DECOTA**
9715 Page Boulevard
St. Louis, Missouri 63132
314–427–5513

16. **THE LOVE-HAILE CO.**
1280 Ridge Avenue
Pittsburgh, Pennsylvania 15233
412–322–3124

17. **COOPER-SIMON & CO., INC.**
7 West Broad Street
Mount Vernon, New York 10552
914–699–5400

18. **NAUDAIN ASSOCIATES**
1032 Suburban Station Building
Philadelphia, Pennsylvania 19103
215–564–3194

19. **NAUDAIN ASSOCIATES**
P. O. Box 1
Lutherville-Timonium, Maryland 21093
301–252–5378
Washington, D. C. –202–361–2727

20. **NAUDAIN ASSOCIATES**
P. O. Box 254
Lynchburg, Virginia 24504
703–846–8044

21. **NELSON COMPANY, INC.**
1294 South Bannock
Denver, Colorado 80223
303–733–5528

22. **C. B. PARSONS & CO.**
5319 Fourth Ave., South
Seattle, Washington 98108
206-762-7373

23. **A. C. SIMMONDS & SONS, LTD.**
285 Yorkland Boulevard
Agincourt, Ontario, Canada
416–445–9111

24. **OSSMANN COMPONENT SALES CORP.**
39 Saginaw Dr.
Rochester, New York 14623
716–442–3290
Syracuse, New York 13225
315–454–4477
Vestal, New York 13850
607–785–9949

25. **VAL-SKOL SALES, INC.**
(Main Office)
510 Fort Wayne Bank Bldg.
Fort Wayne, Indiana 46802
219–742–9122

26. **VAL-SKOL SALES, INC.**
(Branch Office)
12417 Cedar Road
Cleveland Heights, Ohio 44106
216–321–0266

27. **CURTIS DEVELOPMENT & MFG. CO.**
3266 North 33rd Street
Milwaukee, Wisconsin 53216
414–445–1817
R. A. Larsen Bruce Bergeron

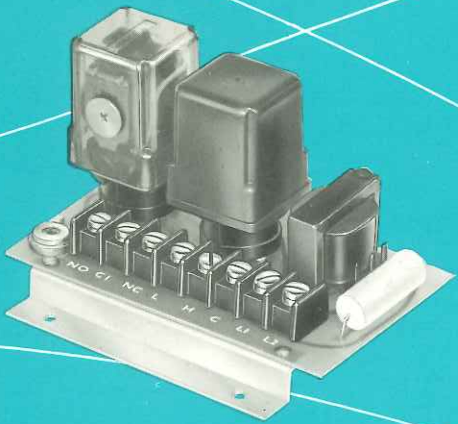
28. **MARTINDALE ELECTRIC COMPANY, LTD.**
(Manufacturing Facility)
Movitex House
6, Empire Way
Wembley, Middlesex, England

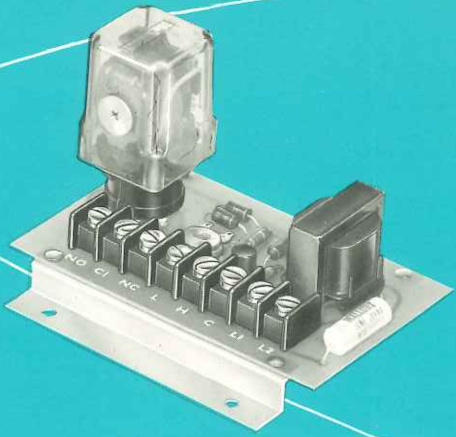
29. **MARTINDALE ELECTRIQUE S.A.**
(Sales Office)
147, Rue D'Aguesseau
Boulogne, sur-Seine, Seine
Paris, France

30. **CUTLER-HAMMER IGRANICE LIMITED**
(Sales Office)
P. O. Box 584
Johannesburg, South Africa

31. **BARBEE**
2122 Hancock Street
San Diego, California 92110
714-297-4213

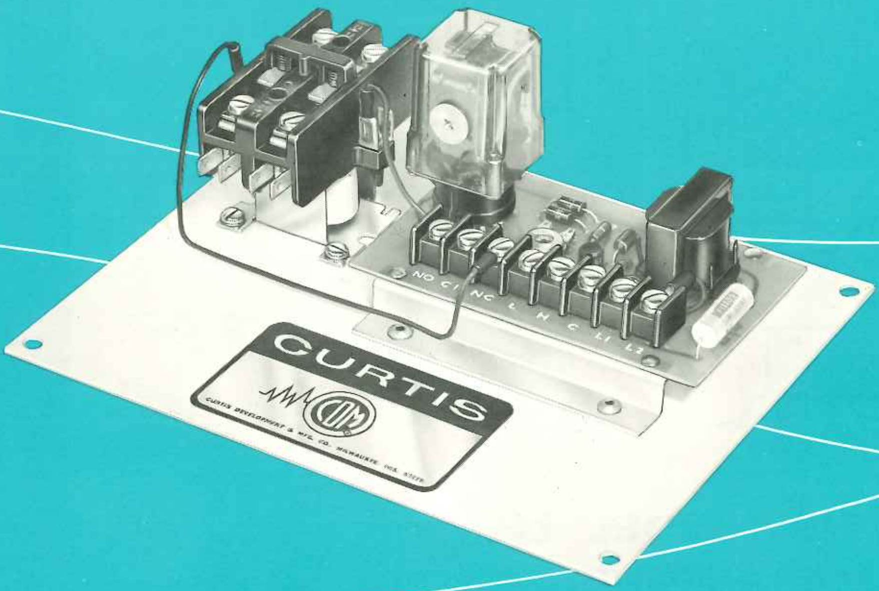
CURTIS
BULLETIN DS-170
MARCH, 1967





CURTIS

ELECTRONIC RESISTANCE SENSING AMPLIFIERS



TYPICAL APPLICATIONS

LIQUID LEVEL CONTROL

- Low Level Indicator
- High Level Indicator
- Milk Pump Control
- Sump Pump Control
- Well Pump Cutoff
- Liquid Flow Indicator
- Industrial Liquids Level Control
- Controlling Liquids To and From Tanks
- Breweries
- Dairies
- Beverages

PHOTO-ELECTRIC CONTROL

- Counting
- Sorting
- Alarm Systems
- Door Operators

TEMPERATURE DETECTOR

- Thermistor Applications
- High Level Control
- Oven Temperature Control
- Platen Temperature Control

PROCESS CONTROL AMPLIFIER

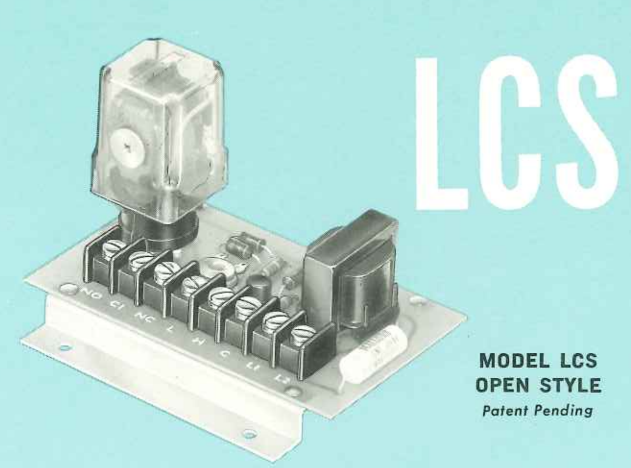
- Low Level Pilot Relay
- Electroplating
- Bath Contamination
- Resistance Monitoring
- Detecting Fluid Interface

CURTIS MODEL LCS

Low Cost
for Standard Applications

FEATURES:

1. Low Cost.
2. Solid State Amplifier.
3. Potentiometer for Sensitivity Adjustment.
4. Low AC Signal Voltage.
5. Plug-in Dust-tight Relay.
6. Barrier Type Terminal Block for Easy Connection.
7. Compact Printed Circuit Design.
8. Various Mountings and Enclosures Available.
9. Available from Stock.
10. Insensitive to Transients.



MODEL LCS
OPEN STYLE
Patent Pending

CURTIS MODEL LCS OPERATION *(0-80,000 Ohms)*

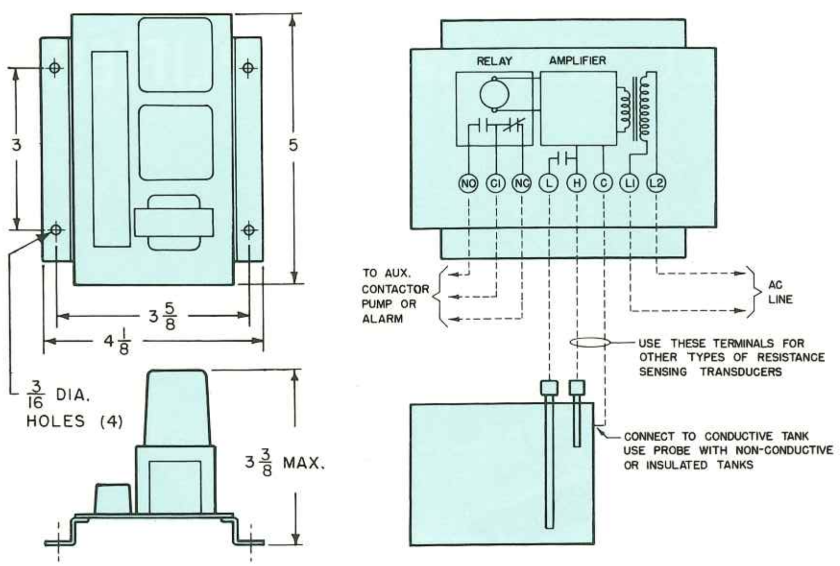
The Curtis LCS resistance sensing control is a versatile electronic device with a solid state amplifier incorporating a silicon controlled rectifier (SCR) for operating the control relay. Operation of the LCS is accomplished by sensing a minute AC current flowing between submerged contact probes in liquid level applications, resistance changes in photo cells due to variations in light intensities on photoelectric applications, resistance changes in thermistors due to variations in temperature, or when used with any other type of resistance sensing transducer or conductive media. When this minute AC current is conducted through an external circuit resistance of 80,000 ohms or less, a signal of sufficient magnitude is present to trigger the SCR and, in turn, energize the control relay.

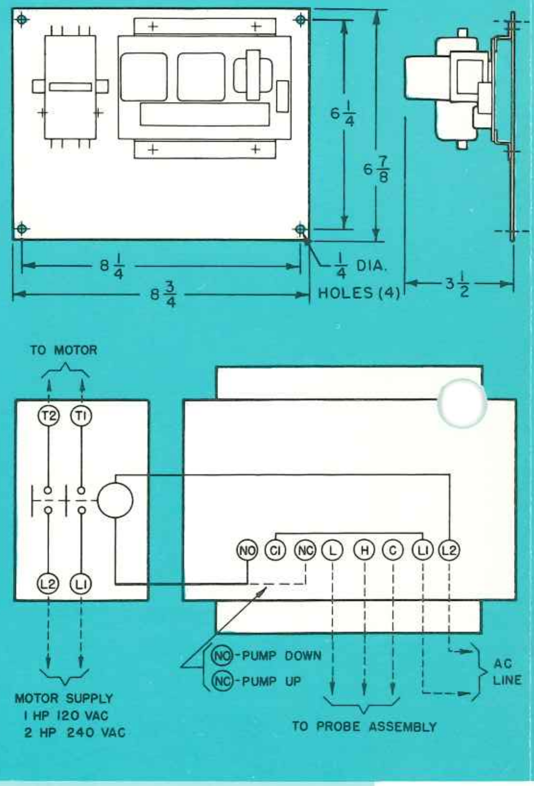
The signal sensitivities required by various liquids or other resistance sensing transducers are varied by a potentiometer. A simple screw driver adjustment allows instant setting for control operation at the required setpoint.

The low cost Model LCS control is suitable for use in most standard liquid level applications and with other sensing devices in applications which provide a fairly wide and rapid change in resistance. However, if a very close resistance differential between pickup and dropout is required, or operating resistance changes are very slow and small, the use of our Model LHS is recommended.

TYPICAL SOLUTIONS' RESISTIVITY	
Solution	**Nominal Resistivity Range (OHM/CC)**
Acids, bases, salts	0 — 20
Dilute acids	20 — 200
Milk, beer	200 — 2000
Water (except distilled)	2000 — 20,000
Distilled water	20,000 — 200,000

OVERALL DIMENSIONS AND CONNECTION DIAGRAMS for Models LCS and LHS

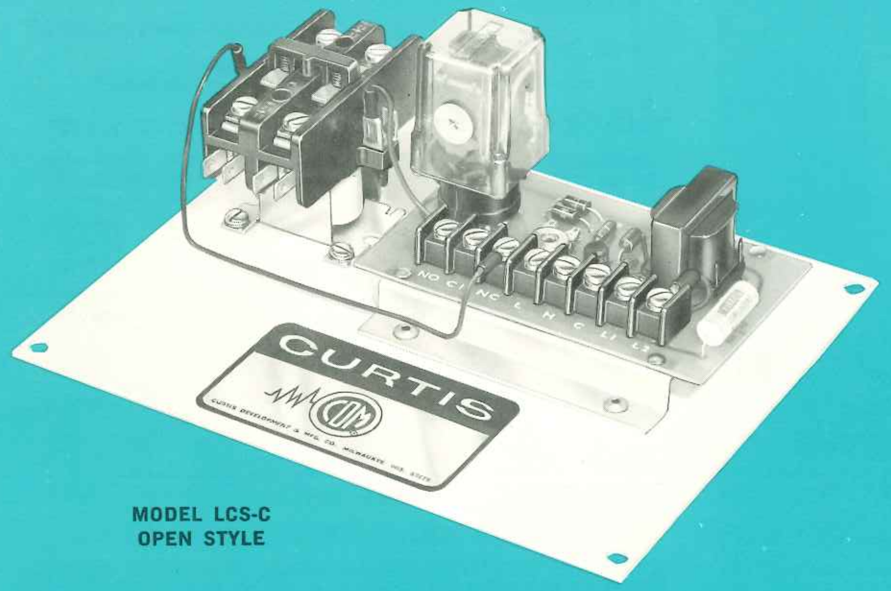

3
5
3 5/8
4 1/8
3/16 DIA.
HOLES (4)
3 3/8 MAX.
RELAY
AMPLIFIER
NO CI NC L H C LI L2
TO AUX. CONTACTOR PUMP OR ALARM
AC LINE
USE THESE TERMINALS FOR OTHER TYPES OF RESISTANCE SENSING TRANSDUCERS
CONNECT TO CONDUCTIVE TANK USE PROBE WITH NON-CONDUCTIVE OR INSULATED TANKS



◀ **OVERALL DIMENSIONS AND CONNECTION DIAGRAM**

CURTIS MODEL LCS-C and MODEL LHS-C CONTACTOR UNITS

These units employ the use of the basic Model LCS and Model LHS resistance sensing amplifiers. They are furnished with a small, ruggedly built contactor for handling heavy loads and motor ratings which exceed that of the plug-in relay of our basic amplifier. These are prewired for customer convenience.



MODEL LCS-C
OPEN STYLE

CONTACTOR RATING

Coil Voltage	Same as specified for Amplifier Input Supply
Contactor Rating	1.0 HP @ 120 Volts AC 2.0 HP @ 240 Volts AC
Contact Form	Two Pole Normally Open (DPNO) Double Break
Terminals	No. 10 Pressure Screw Auxiliary ¼″ Double Quick Connect

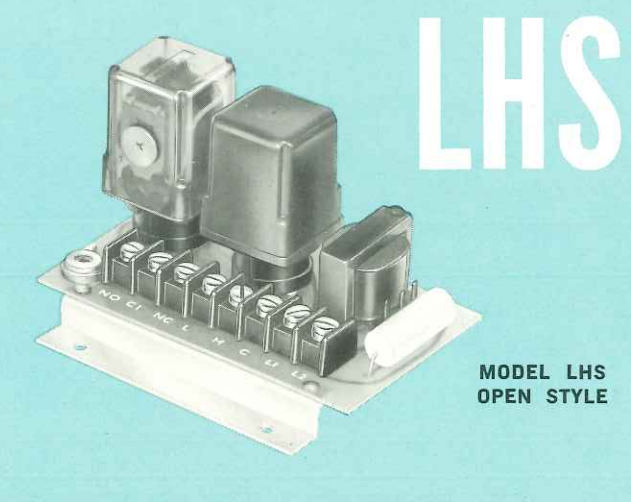
NOTE: *In some applications, a time delay relay is required and can be furnished in place of the contactor upon special request. Contact the factory for this or any other special features desired.*

CURTIS MODEL LHS

High Sensitivity
for Special Applications

FEATURES:

1. Highly Sensitive — Can Be Used to Detect Specific Resistance Values Within a Close Operating Differential.
2. Highly Stable — Solid State Plug-in Amplifier.
3. Bridge Circuit for Accurate Sensing.
4. Potentiometer for Sensitivity Adjustment.
5. Low AC Signal Voltage.
6. Plug-in Dust-tight Relay.
7. Barrier Type Terminal Block for Easy Connection.
8. Compact Printed Circuit Design.
9. Various Mountings and Enclosures Available.
10. Available from Stock.
11. Transient Protected.
12. Positive On-Off Operation Eliminates Relay Chatter.



MODEL LHS
OPEN STYLE

CURTIS MODEL LHS OPERATION *(0-3 Megohms)*

The Curtis LHS resistance sensing control is a versatile, highly sensitive electronic device with a solid state plug-in amplifier for operating the control relay. Operation of the LHS is accomplished by employing a bridge circuit in the amplifier network to sense a minute AC current flowing between submerged contact probes in liquid level applications, resistance changes in photo cells due to variations in light intensities on photoelectric applications, resistance changes in thermistors due to variations in temperature, or when used with any other type of resistance sensing transducer or conductive media. When this minute AC current is conducted through an external circuit resistance of 3,000,000 ohms (3 megohms) or less, a signal of sufficient magnitude is supplied to the bridge circuit, the output of which is amplified to trigger a silicon controlled rectifier (SCR) operating the control relay.

The signal sensitivities required by various liquids or other resistance sensing transducers are varied by a potentiometer in one leg of the bridge circuit, providing accurate sensing with very small signal changes. The Model LHS can detect a resistance change of less than 2% at the desired operating resistance value. For good potentiometer resolution, the LHS is supplied in four ranges between 0 and 3 megohms. See ordering specifications for desired operating range.

The amplifier is a solid state plug-in device with an adjustable threshold of firing over a wide range of resistance. It is temperature and voltage stabilized, transient protected, and not subject to false triggering or long term drift. It will provide positive on-off operation, eliminating relay chatter, even with very small and slow changes in operating resistance.

The Model LHS is ideally suited for liquid level applications requiring high sensitivity or with other resistance sensing devices in applications involving accurate control within a small differential, or to monitor a specific resistance value of a liquid.

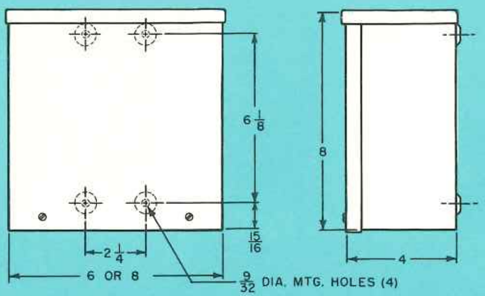
STYLES AND ENCLOSURES AVAILABLE

OPEN STYLE — Basic amplifier models are provided with suitable mounting brackets. Models with contactors are supplied on a heavy 14 gauge steel panel finished in white enamel. See previous illustrations.

NEMA 3 — Weather-resistant enclosure for outdoor applications. They are designed to exclude rain, snow and sleet, or may be used indoors wherever dripping water is a problem. Also meets needs of Nema 1, general purpose dust resistant enclosure. Finished in a satin gray enamel.

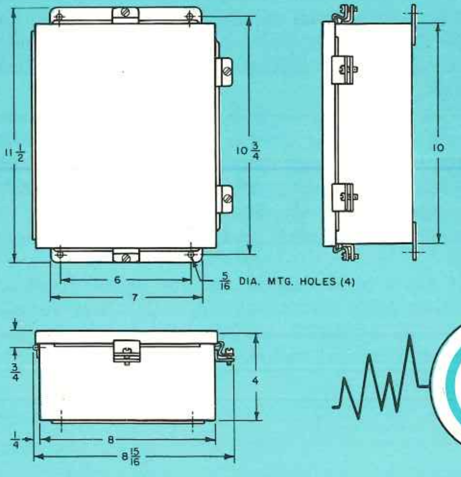
NEMA 3
REGULAR MODEL ENCLOSURE

NEMA 3
CONTACTOR MODEL ENCLOSURE



NEMA 4-JIC — Water-tight-oiltight enclosure for use in areas which may be regularly hosed down and are suitable for use outdoors on ship decks or in dairies, breweries, etc. Also meets the needs of Nema 12 providing protection from dust, dirt and oil. Fabricated from 14 ga. steel, they have welded seams, external mounting feet, and a solid neoprene cover gasket. Finished in a gray hammertone enamel.

NEMA 4-JIC ENCLOSURE



SPECIFICATIONS

MODEL LCS

Input Supply			
	Model LCS-1	120 Volts	50/60 Hz
	Model LCS-2	240 Volts	50/60 Hz
	Model LCS-3	24 Volts	50/60 Hz

Allowable Supply Voltage Variation..................±10%
Power Consumption ....3.0 Watts
Detectable and Adjustable Range............0 — 80,000 ohms
Signal or Probe Voltage.........................24 Volts AC
Signal or Probe Current........Variable with Sensitivity Setting
Typically 500 Microamperes
Control Relay ....Two Pole Double Throw
Probe Contact
One Pole for Holding Circuit (internally connected)
Load Contacts
One Pole Double Throw, Rated:
1/6 HP, 10 Amps, 115V AC — Non-Inductive
1/3 HP @ 230V AC
Ambient Operating Temperature .....0° to 60° C. 32° to 140° F.

MODEL LHS

Input Supply			
	Model LHS-1	120 Volts	50/60 Hz
	Model LHS-2	240 Volts	50/60 Hz
	Model LHS-3	24 Volts	50/60 Hz

Allowable Supply Voltage Variation ....±10%
Power Consumption ....3.0 Watts
Signal or Probe Voltage ....20 Volts AC
Signal or Probe Current
Variable with Range and Sensitivity Setting
Typically 500 Microamperes
Control Relay ....Two Pole Double Throw
Probe Contact
One Pole for Holding Circuit (internally connected)
Load Contacts
One Pole Double Throw, Rated:
1/6 HP, 10 Amps, 115V AC — Non-Inductive
1/3 HP @ 230V AC
Ambient Operating Temperature .....0° to 60° C. 32° to 140° F.

Sensitivity Range Type	Detectable Range (ohms)	Adjustable Range (ohms)	*2% Differential Range (ohms)
A	0 - 25 K	50 - 25 K	2 K - 25 K
B	0 - 100 K	100 - 100 K	10 K - 100 K
C	0 - 1.0 Meg.	1.0 K - 1.0 Meg.	75 K - 1 Meg.
D	0 - 3.0 Meg.	10 K - 3 Meg.	500 K - 3 Meg.

**The resistance change required for on-off operation of the control will be less than 2% of the operating setpoint value in this range.*

ORDERING INFORMATION

Typical Curtis Model Number LHS — C — 1 B Nema 3
Basic Amplifier Type
Contactor (if desired)
Supply Voltage (see specifications)
Sensitivity Range (Model LHS only, see specs.)
Enclosure (if desired)

PRICES AND SHIPPING WEIGHTS

Model	Style	NET PRICE EACH IN QUANTITIES OF 1-24	25-99	100-Up	Shipping Wt. Lbs.
LCS	OPEN	$16.50	$13.75	$11.00	1
LCS	NEMA 3	22.50	18.75	15.00	3
LCS	NEMA 4-JIC	39.00	32.50	26.00	10
LCS-C	OPEN	27.00	22.50	18.00	3
LCS-C	NEMA 3	32.00	26.75	21.50	7
LCS-C	NEMA 4-JIC	48.00	40.00	32.00	11
LHS	OPEN	33.75	28.00	22.50	1
LHS	NEMA 3	39.75	33.00	26.50	3
LHS	NEMA 4-JIC	56.25	46.75	37.50	10
LHS-C	OPEN	44.25	36.75	29.50	3
LHS-C	NEMA 3	49.25	41.00	33.00	7
LHS-C	NEMA 4-JIC	65.25	54.25	43.50	11

TERMS — F.O.B. OUR PLANT, MILWAUKEE, WISCONSIN. NET 30 DAYS TO CONCERNS WITH APPROVED RATING IN DUN & BRADSTREET.

CURTIS DEVELOPMENT & MFG. CO.
3266 NORTH 33rd STREET • MILWAUKEE, WISCONSIN 53216
PHONE: 414 • 445-1817 • TWX 910-262-3125

Litho in U.S.A. — 10M-367-53

CURTIS

BULLETIN DS-163

JULY, 1965

WCC SERIES

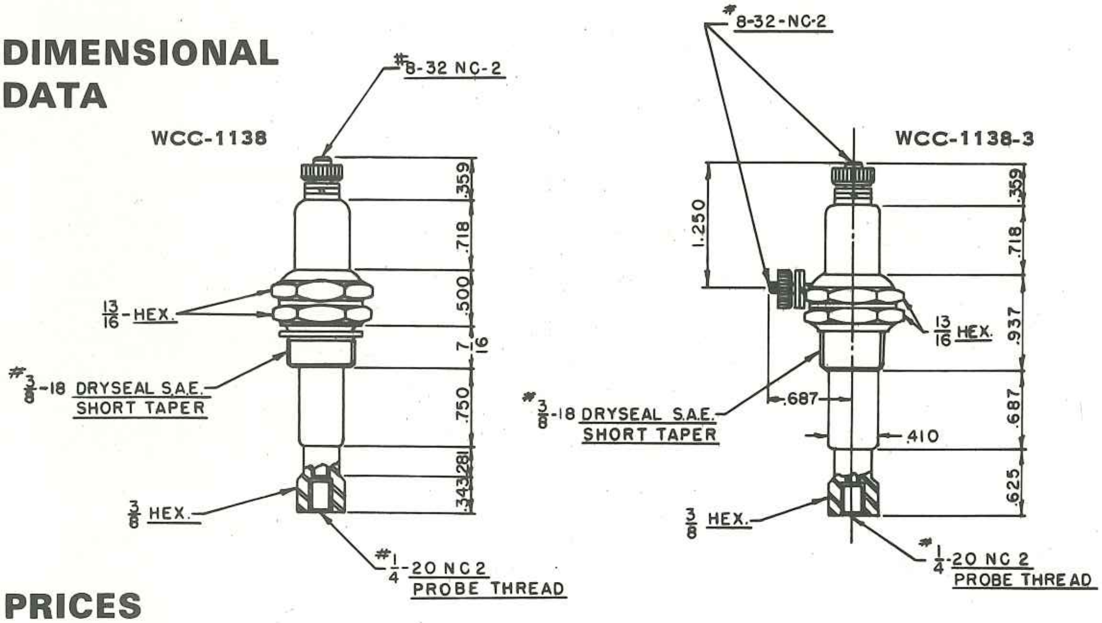
LIQUID LEVEL PROBE ASSEMBLY

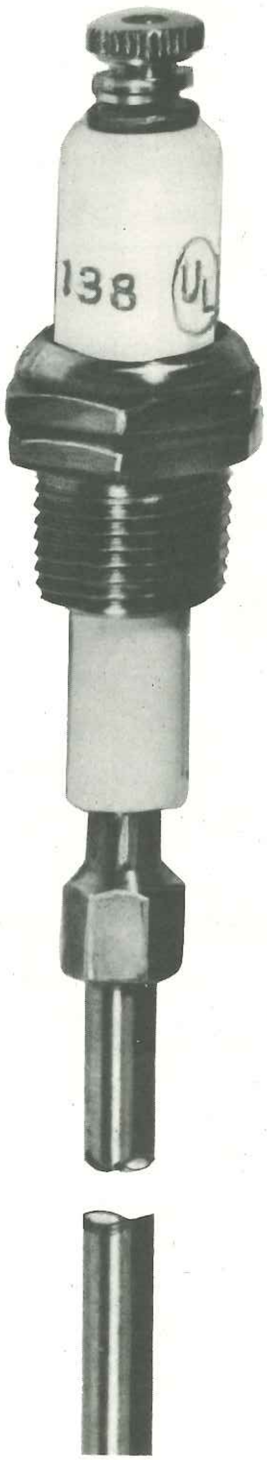
The WCC Series Liquid Level Probe Assemblies are "Underwriter's Laboratories, Inc. listed" and are recommended to be used with the Curtis Model LLS electronic liquid level control unit.

The metal parts are made of 18-8 non-magnetic stainless steel, while the electrical isolation is provided by alumina insulation. Designed to withstand high hydrostatic pressures (to 2500 psi) and temperatures (to 700° F).

Model WCC-1138-3 is basically similar to standard model WCC-1138, with added threaded stud for common ground connection to grounded conductive tanks. A separate common ground probe (lower than the lowest detecting probe) is required for applications with non-conductive or insulated tanks.

DIMENSIONAL DATA





WCC-1138

PRICES

Quantity	Catalog No. WCC-1138 Net Price Ea.	Catalog No. WCC-1138-3 Net Price Ea.
1	$9.60	$10.70
2 - 4	8.75	9.85
5 - 9	7.00	8.10
10 - 24	6.25	7.35
25 - 99	5.95	7.05
100 & up	Contact Factory	Contact Factory

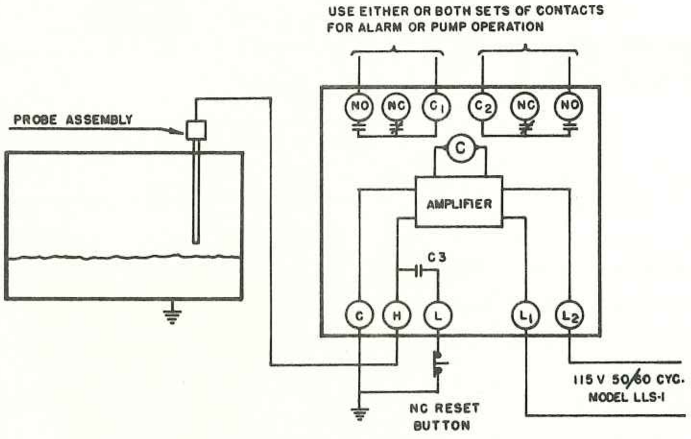
NOTE: The WCC-1138 and WCC-1138-3, as priced above, include a 24″ long by ¼″ diameter, solid stainless steel probe. Contact factory for special probe requirements.

TERMS — F.O.B. OUR PLANT, MILWAUKEE, WISCONSIN. NET 30 DAYS TO CONCERNS WITH APPROVED RATING IN DUN & BRADSTREET.

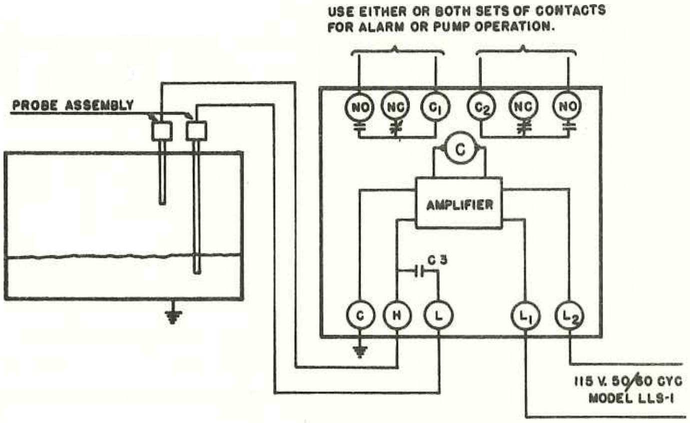
TYPICAL LIQUID LEVEL CONTROL CIRCUITS

HIGH LEVEL ALARM WITH SELF-LATCHING PUSH BUTTON RESET

FOR HIGH LEVEL ALARM ONLY OMIT NC RESET BUTTON

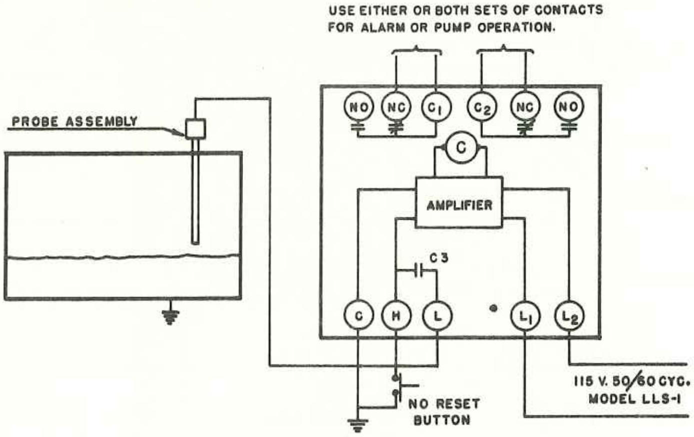


CONSTANT HIGH LEVEL CONTROL FOR HIGH ALARM OR PUMP DOWN OPERATION

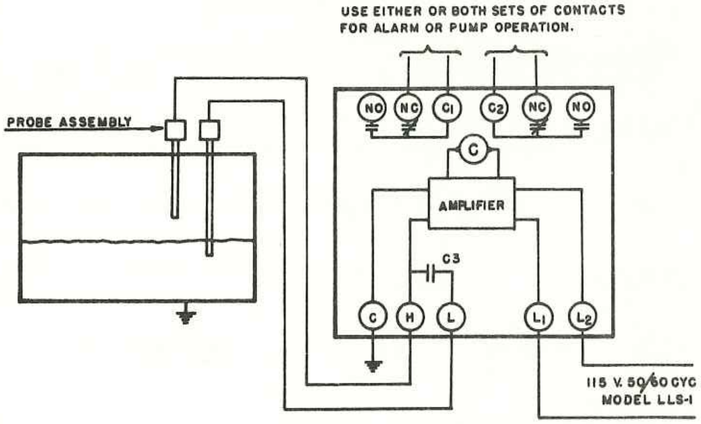


LOW LEVEL ALARM WITH SELF-LATCHING PUSH BUTTON RESET

FOR LOW LEVEL ALARM ONLY OMIT NO RESET BUTTON
AND CONNECT PROBE TO (H) TERMINAL



CONSTANT LOW LEVEL CONTROL FOR LOW ALARM OR PUMP UP OPERATION



CURTIS DEVELOPMENT & MFG. CO.
3266 NORTH 33rd STREET • MILWAUKEE, WISCONSIN 53216
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CURTIS DEVELOPMENT & MFG. CO.
3266 North 33rd Street
Milwaukee, Wisconsin 53216

SPECIFICATION SHEET
for
LIQUID LEVEL CONTROL APPLICATIONS

Company: ______________________ Date: ____________

Address: ______________________ Name: ____________

City, State: ______________________ Title: ____________

LIQUID TO BE CONTROLLED

Type of liquid or solutions: ______________________

Is liquid conductive? ________ Resistivity of Liquid ______________ ohms/cc

Actual measured resistance at desired probe spacing ______________ ohms

Is liquid explosive or flammable? ________ Temperature of Liquid: ______________ °F.

(If unable to determine conductivity or resistance of liquid, submit a one quart sample to our plant for evaluation.)

CONTROL REQUIREMENTS

Input Supply: Volts ________ Frequency ______________ Cycles

Control to operate: Solenoid Valve __________ Motor ________ Contactor __________

Other ______________________

Give electrical rating of device to be operated: H.P. ________ Volts ________ Freq. ________

Amps (inrush) ________ Amps (steady) ________ Watts or VA ________

Number of operations per minute/hour/day: ______________________

Type of enclosure: Open Type ________ General Purpose ________ NEMA I ________

NEMA 12 ______________ Explosionproof ________

Ambient temp. at control? ________ ° F. Distance between control & probes ________

Wire size to be used between control and probes ______________ AWG

(over)

PROBE REQUIREMENTS

Type of Application: Pump up ____________________ Pump down ____________________

High level indicator ____________________ Low level indicator ____________________

Other ____

Material of tank or vessel: Conductive ________________ Non-conductive ________________

Approximate dimensions of tank or vessel:

Height __________ Width __________ Length __________ Diameter ______________

Probe length required: High Probe ________________ Low Probe ____________________

Common Probe ______________________________ (If required for non-conductive tanks)

Will foam be present in liquid? ____

Will there be splashing or agitation of liquid which could cause intermittent operation of

control? ____

ADDITIONAL APPLICATION INFORMATION

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CDM

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